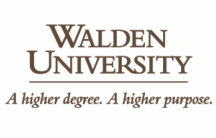

2017

Intimate Partner Violence in Military Couples

Kristy Wood
Walden University

Walden University

College of Social and Behavioral Sciences

This is to certify that the doctoral dissertation by

Kristy Wood

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

Review Committee
Dr. Sandra Caramela-Miller, Committee Chairperson, Psychology Faculty
Dr. James Herndon, Committee Member, Psychology Faculty
Dr. Laurie Westlake, University Reviewer, Psychology Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2017

Abstract

Intimate Partner Violence in Military Couples

by

Kristy Wood

MS, Walden University, 2014

BS, Walden University, 2013

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology, Specialization Forensic Psychology

Walden University

November 2017

Abstract

Intimate partner violence is negatively impacting the military community. This social issue is not understood well enough to create effective prevention programs or improve intervention programs. Missing from the literature is research investigating the complex nature of intimate partner violence using attachment as the framework. The purpose behind this quantitative, cross-sectional study was to understand the relationships between attachment styles, posttraumatic stress disorder, and intimate partner violence. Whether traumatic brain injury mediates these relationships was considered. There were 228 surveys collected from military couples, using the Adult Attachment Scale, Posttraumatic Stress Disorder Checklist—Military Version, and Intimate Justice Scale. Traumatic brain injury diagnoses were self-reported. These data were analyzed using a factorial analysis of variance to understand the relationships between and among the variables. The main effect for attachment and interaction effects for attachment and posttraumatic stress disorder were statistically significant. The way in which attachment styles and posttraumatic stress symptoms interact, together and separately, were significant influences on violence risk. A linear regression using the mediator function was conducted to determine the impact of traumatic brain injury on any significant relationships. The significant relationships found within the factorial analysis were not influenced by traumatic brain injury. Positive social change implications include improving practitioners' knowledge base on violence within military couples by focusing on altering attachment styles, possibly lowering intimate partner violence rates. The military could be strengthened by creating more resilient soldiers with healthier families.

Intimate Partner Violence in Military Couples

by

Kristy Wood

MS, Walden University, 2014

BS, Walden University, 2013

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology, Specialization Forensic Psychology

Walden University

November 2017

Dedication

The project is dedicated to my children, who inspired me to go back to school, and my husband, who has been a constant source of support. The project is dedicated to the military families who serve our country every day, whose sacrifices are appreciated.

Acknowledgments

I would like to thank my chair, Dr. Sandra Caramela-Miller, who has been nothing but supportive throughout the process. Her insight and perspective allowed for the dissertation to become what it is. I would like to thank Dr. James Herndon, the second committee member for the project. His attention to detail and specific feedback made the process truly enlightening. Finally, I would like to thank Dr. Laurie Westlake for her diligence and creative thinking. The committee allowed for the dissertation process to be a truly rewarding experience.

Table of Contents

List of Tables

List of Figures

Chapter 1: Introduction to the Study

Introduction

Intimate partner violence (IPV) is a significant social issue within the military population, impacted by various factors, including psychological disorders, such as posttraumatic stress disorder (PTSD; Trevillion et al., 2015). Military couples experiencing IPV is not a new problem, as deployments and violence toward intimate partners have constituted a cycle for generations (MacManus et al., 2015). Individual factors have different correlations with IPV (Slep, Foran, Heyman, & Snarr, 2014). These behaviors are often influenced by external factors, such as stress from one's employment (Slep et al., 2014). MacManus et al. (2015) asserted more research is needed so effective interventions based on understanding the risk factors for IPV can be created.

Deployments have been a consistent part of military life for over a decade (Johnson & Brown, 2014). Even with high reporting rates, the intervention programs currently used for IPV are considered inadequate (Johnson & Brown, 2014). These programs could be improved if the factors correlating with IPV were better understood. Deployments come with concerns about soldiers' mental health and their struggles with returning from combat (Vasterling et al., 2015). Both issues are correlated with IPV (Vasterling et al., 2015). Documented relationships are evidence supporting the idea IPV occurring within military couples must be better understood. Increased stress from the military lifestyle is correlated with more extensive trauma than is seen in civilian couples (Aronson, Perkins, & Olson, 2014). The finding is evidence military couples should be

focused on specifically. Understanding IPV influences, internal or external, could lead to positive social change.

The results were based on an examination of the relationships between attachment styles, PTSD, and IPV. Whether traumatic brain injury (TBI) influenced these relationships was considered. Positive social change may come about from the effort to provide insight into the impact attachment styles and PTSD symptoms have on relationships, including unhealthy behaviors such as IPV. Insight comes with the potential for providing valuable information practitioners can use when developing more effective interventions or creating prevention programs. These programs could be based on understanding attachment styles, PTSD symptomatology, and TBI. With more effective programs in place, there is the chance trauma may be avoided, possibly improving the health of the military population.

Within Chapter 1, information is presented about what is currently known regarding the relationships between attachment styles, PTSD, IPV, and TBI. IPV as a problem military couples experience, its prevalence, and why the social issue is a major concern are addressed. The purpose in this exploration was to develop greater understanding of the influence attachment styles and PTSD symptoms have on IPV, including whether TBI mediates any found relationships. Understanding these relationships may create stronger military couples, possibly lowering IPV prevalence within the military. Data pertaining to the research questions were analyzed and interpreted through the lens of attachment theory, which formed the study's theoretical framework.

A quantitative method was used to examine the relationships between the independent variables (attachment styles, PTSD symptoms), the dependent variable (IPV), and the mediator variable (TBI). The necessary participants were couples associated with the military. Participation requirements included involvement in an intimate relationship in which one partner was either active duty or reserve military. Specific assumptions, limitations, and delimitations were a means of providing boundaries for the research. Addressing these issues ensured the results would be valid and reliable. Included within the proceeding sections is comprehensive background information on the population, starting with current research.

Background

The variables correlating with violent behavior are not adequately understood (Trevillion et al., 2015). In the available research, the sample sizes were too small, many events were not reported accurately, and victims did not always disclose information about their experiences (Dillon, Hussain, Loxton, & Rahman, 2013). Other methodological issues, such as lack of military-specific variables, use of cross-sectional designs, and use of self-report measures, further complicate the ability to understand variables influencing IPV (Rodrigues, Funderburk, Keating, & Maisto, 2015). Further research in this area may serve to clarify the relationships between attachment styles, PTSD, IPV, and TBI. Practitioners may then apply this knowledge within clinical settings.

The relationship between PTSD and IPV is not understood well enough. Consideration of the unique impact trauma has on behavior within IPV intervention

programs may be a way to make these programs more effective (Semiatin, Torres, LaMotte, Portnoy, & Murphy, 2017; Van Voorhees & Beckham, 2015). Aggressive behaviors associated with PTSD are often directed toward one's spouse (Tinny & Gerlock, 2014). A service member who engages in such behaviors could subsequently be arrested for domestic violence (Tinny & Gerlock, 2014). While a relationship between aggressive PTSD symptoms and IPV exists, another aspect under consideration is the influence various military-specific experiences have. Deployment experiences influence IPV risk levels, but PTSD symptoms are a more significant risk factor than experiences alone (Zamorski & Wiens-Kinkaid, 2013). Practitioners could better address IPV with a more comprehensive understanding regarding factors influencing violent behaviors, such as specific PTSD symptoms.

PTSD symptoms from the heightened arousal category have higher correlations with aggressive behaviors than other symptom clusters do (Taft, 2013). Whether a triggering event, such as a reminder of something traumatic, mediates the relationship between PTSD symptoms and aggression has been considered (LaMotte, Taft, Weatherill, Scott, & Eckhardt, 2016). Such research has been used to support the idea PTSD symptoms alone do not explain interpersonal violence. The correlation between PTSD symptoms and IPV alone is small, with antisocial personality disorder features impacting the relationship (Taft et al., 2012). An added complication surrounding the relationships with these variables is PTSD symptoms overlapping with TBI ones (Bremner, 2016). The overlapping symptoms are illustrative researchers should perform more studies on the influence multiple variables together have on IPV.

The relationship between attachment styles and violence is one that is influential in domestic violence cases. Researchers investigating civilians have found attachment insecurity is correlated with violent behavior (Oka, Sandberg, Bradford, & Brown, 2014). Whether attachment style or PTSD has a larger impact on IPV should be considered. Mental disorder symptomatology is an influence on domestic violence risk levels (Buck, Leenaars, Emmelkamp, & Marle, 2014). This study's results can be compared with the Buck et al. (2014) study, while considering the impact of using a military population. Individual factors may be strong predictors of distress for those who experience IPV, especially when considered together (Skomorovsky, Hujaleh, & Wolejszo, 2017). Skomorovsky et al. (2017) expressed the need for further research on which factors warrant consideration when creating interventions.

The relationship between attachment and PTSD within the military population may be influential on IPV. Being neglected or abused by parents is correlated with soldiers developing PTSD symptomatology, possibly impacting their ability to overcome stressors in a healthy manner (Choi et al., 2013). Individuals with a more traumatic childhood may struggle with overcoming military stressors. Attachment style is related to PTSD development, as those with insecure attachment styles report more symptoms and are more overcome by military stressors (Escolas et al., 2012). Researchers have asserted more understanding is needed of the role different attachment styles play in PTSD symptomatology development (Escolas et al., 2012). A methodological weakness, based on these results, is not understanding what individuals' attachment styles were before symptoms developed (Escolas et al., 2012). These contentions have been used to

justify more studies regarding the influence attachment styles and PTSD symptomatology have on IPV, especially aggression.

One symptom correlated with both IPV and attachment style is aggression. Aggressive behaviors are documented as being influenced by attachment style (Wilson, Gardner, Brosi, Topham, & Busby, 2013). Addressing the relationship between attachment style and PTSD symptoms such as aggression might inform therapists of more effective ways to approach couples impacted by IPV. Understanding traumatic events soldiers experienced along with their PTSD symptoms is important because increased knowledge could inform the programs therapists use (Wolf et al., 2013). Further understanding regarding the relationships between attachment styles, PTSD, and IPV is needed to improve programs. The need for better programs is further supported by statistics.

Problem Statement

IPV is a serious social issue, as a third of American women and a quarter of men are victims at some point (American Psychological Association, 2017). Interpersonal violence impacts both military and civilian couples. Other organizations found one in four females and one in 10 males are victims (U.S. Department of Veterans Affairs, 2015). The rates for females associated with the military are almost triple (U.S. Department of Veterans Affairs, 2015). IPV has been described as a cycle in which violent behaviors cause guilt before they occur again (Norris, 2015).

Researchers developing interventions for the military population noted risks associated with IPV include physical injury, development of health issues, and suicidal

thoughts (Dichter, Haywood, Butler, Bellamy, & Iverson, 2017). Other known problems associated with IPV include eating disorders, drug use, increased risk of contracting sexually transmitted diseases, psychological disorders, unwanted pregnancy, and alcohol abuse (Collett & Bennett, 2015; World Health Organization, 2016). Over a third of females seen at the emergency room with an injury consistent with a violent act were harmed by their partner (Norris, 2015). This statistic is further evidence IPV is a significant social problem. Practitioners can address the problems associated with IPV when factors placing military couples at risk are better understood.

Future research should be inclusive of considerations regarding the relationship between IPV and military-specific experiences (Gerber, Iverson, Dichter, Klap, & Latta, 2014). Assertions about future research are evidence a gap exists, and others studying IPV have cited specific relationships to consider. The complex relationships IPV has with various factors, including attachment styles and mental disorders, have been noted as needing examination (Karakurt, Silver, & Keiley, 2016). Researchers may address this gap in the literature by applying attachment theory, as the ideas within the theory could be helpful in creating effective interventions (Wright, 2017). Promoting the idea more research should be done is the severe nature of IPV (Powell, Marquez, & Perkins, 2014).

Purpose of the Study

A quantitative design was used for examining the relationships between attachment styles, PTSD symptoms, and IPV, controlling for TBI, in military couples. The examination was a way to address a research gap on IPV occurring within military relationships. The intent was to describe the relationships between attachment styles,

PTSD, and IPV. The design reflected an understanding of the role TBI plays, because brain injury could have mediated any relationships found. Information obtained from survey instruments was used to address the research gap on IPV in the military population.

If the dependent variable, IPV, has statistically significant relationships with the independent variables (attachment styles, PTSD symptomatology), practitioners can improve programs with these data. However, if no relationships are found, researchers will need to continue investigating the possible reasons IPV occurs within the military population. If the mediator variable, TBI, explains the relationships between the independent variables and dependent variable, practitioners can use brain injury as an explanation for IPV in military couples. Lack of a relationship between these variables would be verification more research is needed regarding the impact TBI has on behavior in the military population. If no relationships are found between the variables, attachment styles, PTSD, and TBI may be eliminated as explanations for IPV in military couples. Eliminating these variables as explanations would be evidence further research is necessary.

Research Questions and Hypotheses

The independent variables were the three attachment styles (secure attachment, anxious attachment, avoidant attachment) and PTSD symptomatology. The dependent variable was IPV. The mediator variable, TBI, was addressed using a secondary analysis. The association being tested was whether a relationship existed between the independent

variables and dependent variable. Whether these relationships were impacted by TBI was tested in a secondary analysis.

The variables were measured using survey measurements. These instruments were the Posttraumatic Stress Disorder Checklist—Military Version (PCL-M), Adult Attachment Scale (AAS), and Intimate Justice Scale (IJS). The PCL-M was used as a measurement tool for PTSD symptomatology. The AAS was the scale used to determine the attachment style of the participant. The IJS was scored as means of measuring IPV risk. TBI, the mediator variable, was measured through self-reporting. The following research questions were addressed using attachment theory as the framework. Also presented are the null hypotheses (H_0) and the alternative hypotheses (H_a).

Research Question 1: What is the relationship between attachment styles, PTSD, and IPV in military couples?

$H_0$1: There is no relationship between secure attachment style, PTSD, and IPV in military couples.

H_a1: There is a significant relationship between secure attachment style, PTSD, and IPV in military couples.

$H_0$2: There is no relationship between anxious attachment style, PTSD, and IPV in military couples.

H_a2: There is a significant relationship between anxious attachment style, PTSD, and IPV in military couples.

$H_0$3: There is no relationship between avoidant attachment style, PTSD, and IPV in military couples.

H_a3: There is a significant relationship between avoidant attachment style, PTSD, and IPV in military couples.

Research Question 2: What role does TBI play in the relationship between attachment style, PTSD, and IPV in military couples?

H_04: TBI does not mediate the relationship between secure attachment style, PTSD, and IPV in military couples.

H_a4: TBI mediates the relationship between secure attachment style, PTSD, and IPV in military couples.

H_05: TBI does not mediate the relationship between anxious attachment style, PTSD, and IPV in military couples.

H_a5: TBI mediates the relationship between anxious attachment style, PTSD, and IPV in military couples.

H_06: TBI does not mediate the relationship between avoidant attachment style, PTSD, and IPV in military couples

H_a6: TBI mediates the relationship between avoidant attachment style, PTSD, and IPV in military couples.

Theoretical Framework for the Study

The framework was Bowlby's (1958) attachment theory, where the mother–child relationship is described as more than a physiological need. According to attachment theory, individuals' attachments with others result from their relationships with caregivers at a young age (Wilhelmsson Göstas, Wiberg, Engström, & Kjellin, 2012). Attachment theory can be used when explaining interpersonal relationships. Children's

environment at an early age is an essential part of their development (Bowlby, 1940). Attachment theory is helpful in comprehending relationships between intimate partners along with personality development. Determining an individual's attachment style can help with understanding a person's development, given securely attached persons are considered healthier (Gartstein & Iverson, 2014). Those with secure attachments may be better adjusted after stressful situations (Gartstein & Iverson, 2014). Attachment theory was the lens the research questions were approached with. The results were interpreted through this lens.

Attachment theory has been the background for therapeutic interventions, but this work must be continued and even expanded (Marvin, 2013). Relationships beyond those between parents and children may be better understood with further research (Marvin, 2013). Practitioners may use attachment theory to inform intervention or prevention programs for military couples. Mental disorders or behavioral issues may be understood through this lens (Holmes, 2014). Aspects of the chosen variables are addressed using attachment theory. Attachment theory as the framework was justification for the chosen nature of the study.

Nature of the Study

The methodology selected was a cross-sectional, quantitative approach. In choosing the quantitative method, the relationships between the variables were examined using statistical analysis (Creswell, 2014). Quantitative methods were a way to gain an understanding about the relationships between attachment styles, PTSD, TBI, and IPV. The cross-sectional approach was an effective way to address research questions where

the variables could not be manipulated (Frankfort-Nachmias, Nachmias, & DeWaard, 2015). The independent variables were participants' attachment styles and their PTSD symptomatology, the dependent variable was IPV, and the mediator variable was TBI. By using the cross-sectional approach, relationships between the variables were understood by measuring the different groups over a shorter time period (Stangor, 2014), rather than collecting data over long periods.

In determining instruments to use when collecting these data, the ones used previously were considered. Frey et al. (2011) used the Posttraumatic Stress Disorder Checklist—Military Version (PCL-M), the Multi-Item Measure of Adult Romantic Attachment (MIMARA), and the Intimate Justice Scale (IJS) when conducting a similar study. These were the instruments used when measuring the chosen variables, except for the MIMARA, because they had been used before with the military population. Rather than using the MIMARA, the Adult Attachment Scale (AAS) was used. Finally, TBI was measured using self-reports in which participants acknowledged whether they had or had not been diagnosed with a TBI.

Reliability and validity of the instruments was considered when deciding which ones were appropriate for use. The PCL-M tested high on test-retest reliability and construct validity with the military population (Bjornestad, Schweinle, & Elhai, 2014). Reliability scores for the AAS were reasonable (Collins & Read, 1990). The IJS tested high in internal reliability and criterion validity (Frey et al., 2011). These rates were support for using these specific instruments for data collection.

These data were collected from military couples who volunteered to participate. Primary data sources from military couples at Fort Bragg and surrounding reserve stations were used. These data were collected at a place of the participants' choosing. The data were results from the instruments measuring attachment styles, PTSD symptomatology, and IPV risk. Participants self-reported whether a TBI diagnosis had been assigned by a medical practitioner. In determining the relationships between the variables, more than one statistical analysis method was required.

The first research question was addressed with a factorial analysis of variance (ANOVA). A factorial ANOVA was conducted because an ANOVA is a way to describe the relationships between a dependent variable (IPV) and more than one independent variable (Cardinal & Aitken, 2013). Using a factorial design was a way to understand the complex relationships between the variables, as ANOVAS are considered a preferred method (Roberts & Russo, 2014). The independent variables' relationships with one another and their relationships with the dependent variable needed to be understood. With two independent variables (attachment styles, PTSD symptoms), the ANOVA was an appropriate strategy for analyzing the collected data. The second research question with associated hypotheses was answered using an additional analytic strategy.

The second research question was answered using a linear regression with the mediator function. Mediation was performed as a statistical way of determining whether TBI was an explanation for the relationships between the independent variables (attachment styles, PTSD symptoms) and the dependent variable (IPV). Mediation by TBI was indication any relationships between the independent variables and dependent

variable may be explained by the relationship with the condition (Field, 2013). These two analytic strategies were the best methods for answering the research questions.

Definitions

The following definitions are presented as a means of providing context and clarification:

Anxious attachment: Not feeling a caregiver is there for the person, nor being capable of confidently exploring the world (Park, 2016). The person may develop anxiety when away from the caregiver (Park, 2016).

Attachment style: How one relates with others based on whether there was a positive attachment developed with caregivers or not (Wilhelm, Gillis, & Parker, 2016).

Avoidant attachment: Lacking the idea caregivers will be responsive to needs, interferes with emotional connectivity later in life (Park, 2016).

Intimate partner violence (IPV): Any violent act or aggression committed by someone in an intimate relationship with the victim (Centers for Disease Control and Prevention, 2016b).

Posttraumatic stress disorder (PTSD) symptoms: PTSD symptoms an individual has experienced for at least 1 month, ranging from flashbacks to avoiding people, places, or objects (National Institute of Mental Health, 2016).

Secure attachment: Feeling the caregiver will be available when needed while being capable of going out into the world (Park, 2016).

Traumatic brain injury (TBI): A head injury causing loss of consciousness or memory, confusion, or physical effects (Eme, 2017). One consideration is how TBI can

occur from other head injuries such as those occurring during domestic violence incidents (Murray, Lundgren, Olson, & Hunnicutt, 2016).

Assumptions

There were certain assumptions under consideration when these data were collected. The first assumption was the participants would answer the survey questions honestly. Honesty was necessary when answering all questions, including those pertaining to affiliation with the military and IPV occurring within relationships. Another assumption was both members of the relationship would be participating. Participation from both members helped in focusing on the couple as a whole, rather than on one member who might be the soldier or the civilian.

The next assumption was the participants would represent the population, as this would make the results generalizable (Mertens, 2014). The military population is quite diverse, so there needed to be enough heterogeneity in the participants to be representative. Other assumptions included objectivity about the work and not imposing beliefs about the population or possible results. Objectivity may be difficult when dealing with violence, but it was necessary. A final assumption was the results interpretation, as it was assumed the surveys were valid methods of measuring the variables. This assumption included considering whether these results could have been influenced by other, unknown variables (Creswell, 2014).

Scope and Delimitations

The research scope included individuals in committed relationships, with at least one member being either active duty or reserve military. These couples were either

married or in long-term relationships. The scope was chosen based on the research gap described previously, with the consideration not all couples are married. Couples in long-term relationships experience the same type of intimacy regardless of marital status, meaning they may engage in similar behaviors. Including couples in long-term relationships allowed expansive focus beyond married couples.

Delimitations were considered, including the focus on military couples from a specific military branch, and asking questions about IPV. Couples chosen for participation were affiliated with the Army, with most recruited from Fort Bragg. This choice was due to the base's proximity, and the fact Fort Bragg is the largest Army base in the United States. Couples from reserve stations near Fort Bragg were included because these military members have experiences similar to those of active duty couples.

The second delimitation was the specific focus of the questions. The focus was the relationships between attachment styles, PTSD, TBI and IPV. Additional research including PTSD is beneficial because not enough research using the military population exists (Yambo et al., 2016). Given the lack of research into the military family, understanding the complex relationships different factors have with IPV will be a valuable contribution to the field. The results may be generalizable to military couples, specifically those associated with the Army. These contributions may be impacted by the study's limitations, a factor which must be considered.

Limitations

The results could have been impacted by certain limitations. Not being able to establish causality was the first limitation. Not finding causation from the analysis was

an internal validity threat (Frankfort-Nachmias, Nachmias, & DeWaard, 2015). The research was not an experimental design, so there was no expectation causality would be determined. The internal validity threat is a concern for any design choice a researcher makes, but it is especially important when the threat is related to the design (Frankfort-Nachmias et al., 2015). Although a correlation could be found between attachment styles, PTSD, and IPV, the variables causing IPV were not discovered.

Another limitation was whether the participants would disclose IPV incidents occurring within their relationship. IPV is not accurately represented within the research, even though prevalence rates are high (Chapman & Monk, 2015). Those who experience or engage in interpersonal violence often do not disclose their role, for various reasons, such as fear or being in denial about the abuse (Chapman & Monk, 2015). Limited or no disclosure by some participants had to be considered, especially if they were concerned about any repercussions. As noted previously, it was assumed the participants would respond truthfully, including answering questions about IPV within their relationship. Truthful answers were helpful in ensuring the study would address a gap in the research.

Biases that might be an influence on the outcome were considered, given their potential influence on the results. Bias may have begun to manifest during data collection, including selection bias if those willing to participate were homogeneous (Simundic, 2013). A homogeneous sample would not have represented the military population. Selection bias would have occurred if the sample had consisted of all Caucasian couples, or those with lower IPV levels occurring within their relationships. Data collection bias, occurring when personal feelings about the topic impact the way in

which data are collected, was another risk (Smith & Noble, 2014). Measurement bias, which occurs when the measurement instruments used have not been tested for reliability or validity, was the final bias considered (Smith & Noble, 2014). Another limitation related to data collection bias was understanding how PTSD symptomatology could be correlated with attachment style. The possible relationship may have been a complication in understanding the direction of influence. These limitations needed to be addressed when the study was conducted.

Certain measures were taken to address the discussed limitations. For example, selection bias was overcome by using random sampling methods (Simundic, 2013). Sampling methods using randomization helped to limit the impact selection bias might have had on the results. Data collection bias was eliminated by working with committee members to guarantee objectivity was maintained. Measurement bias was avoided by using surveys tested for reliability and validity. Overcoming these biases, along with any others that came up during the study, helped to ensure the significance of the research was not lost while addressing a gap in forensic psychology.

Significance

There is a lack of research on IPV using the military population, with the available research on the relationship between PTSD and interpersonal aggression being considered inadequate (Angkaw et al., 2013; McNeil, 2014). The health of the military population can be improved with more effective IPV programs. Using attachment theory could enhance therapeutic practice, as therapists may improve coping strategies used by a couple while helping clients overcome emotional issues (Wei, 2015). Addressing PTSD

symptomatology could lower the prevalence of violence in military couples, given the idea combat stress may increase IPV risk (Hundt & Holohan, 2012).

As these relationships are complex, attachment styles being an influence on violent behavior was considered. Understanding attachment styles in PTSD and IPV is beneficial, because therapists have been successful when using the couples' attachment styles as a background for conducting therapy (Seedall & Wampler, 2013). Knowledge regarding how these variables interact with one another might advance therapeutic methods, improving the mental health of military couples. Program enhancements are one way in which positive social change may be inspired by the results.

Positive social change may be created using the presented research. IPV comes with many negative side effects, ranging from divorce to the development of mental health problems (Durham et al., 2013). Military life comes with certain stressors increasing the risk for negative effects (Durham et al., 2013). If the relationship between attachment styles, PTSD symptoms, and IPV is found to be significant, therapists can provide more effective treatments. Interventions may even be improved, given practitioners have found addressing attachment may effectively reduce IPV prevalence (Kottenstette & Stulberg, 2013). The significance of IPV within the military population may be better understood based on the results presented.

Summary

IPV impacts millions of Americans, and more information is needed to prevent future violence (Centers for Disease Control and Prevention, 2016a). This understanding could promote healthier relationships (Centers for Disease Control and Prevention,

2016a). Couples who might avoid these adverse outcomes could be a catalyst for social change. Effective interventions for military families, especially those experiencing PTSD symptomatology, have the potential to promote family members' mental health (Blow, Curtis, Wittenborn, & Gorman, 2015). The risk for relationship problems, including divorce, may be lowered (Blow et al., 2015). The potential for positive social change was further evidence more research on IPV in military couples was needed.

Within Chapter 1, the study was introduced, along with the need for understanding IPV in military couples. This introduction served as groundwork for understanding why attachment styles, PTSD, and TBI should be considered when researching IPV. The military population is diverse, evidence there was a need to look at IPV as a problem with many contributing variables. In conducting this study, the recommendation for furthering the understanding of individual factors was followed, as increased knowledge may lead to improved intervention programs (Skomorovsky, 2017). One such individual factor that was considered was attachment style.

Attachment style represents one way to understand the ways in which PTSD develops and the risk for engaging in violence. Attachment based research methods have been recommended for investigating how IPV should be addressed (Wright, 2017). Using this framework was a way to obtain a deeper understanding of interpersonal violence while providing evidence concerning methods for developing more effective IPV programs. Understanding the impact attachment styles and PTSD have on IPV is expected to improve the ways in which IPV is addressed within the military population

(Karakurt et al., 2016). These ideas, the foundation for Chapter 1, were the basis for this study.

In Chapter 2, a review of current relevant research is presented, along with the chosen framework for this study. Research from peer-reviewed journal articles published during the past 5 years is discussed. Also included are highlights of the negative impact IPV has on military families. The limited research associated with the relationship between these specific variables is further discussed. An examination of attachment style changes throughout individuals' lives based on their experiences, including whether PTSD symptomatology may influence these changes, is presented in Chapter 2. This relevant information was a guide for the construction and conduction of the study.

Chapter 2: Literature Review

Introduction

Even with an extensive research base available on IPV, researchers have had limited success creating effective intervention strategies (Choo et al., 2015). The population engaging in domestic violence is diverse, with many different reactions when violent behaviors occur (Choo et al., 2015). Intervention programs would be more effective if they were individualized based on the needs of those involved in IPV. The chance exists for effective prevention programs to be developed. Understanding of the underlying causes of IPV could be enhanced through evaluation of individual cases (Motz, 2014). Determining the correlations between certain characteristics and violent behavior reduces the risk individuals with these traits pose (Motz, 2014). Understanding IPV more thoroughly is a future research goal, as this will increase the probability these behaviors can be prevented (Khaw, 2016). The purpose behind the study was understanding the relationships between attachment styles, PTSD, and IPV in military couples. Whether TBI mediated any found relationships was investigated.

IPV is a complex, prevalent issue within the military, which existing regulations address in different ways. The Department of Defense (DoD) realizes what a pervasive problem IPV is within the military population (Shewmaker & Shewmaker, 2014). This realization is why policies are in place to address interpersonal violence (Shewmaker & Shewmaker, 2014). The DoD handles the problem in many ways, ranging from taking criminal action to providing victim services (Shewmaker & Shewmaker, 2014). The ways in which the military addresses IPV can be improved with a better understanding

about factors influencing violent behavior. Combat deployments are related to a decline in the quality of interpersonal relationships (Cigrang et al., 2014). The decline could be one reason these programs exist. Despite these programs and awareness of IPV in the DoD, the military population appears quite resilient, even after deployments (Sandoz, Moyer, & Armelie, 2014). Not enough is known about the underlying causes for such resiliency (Sandoz et al., 2014). A greater understanding of resiliency within these couples can come from this study, starting with the research presented in this chapter.

Information is provided within Chapter 2 about the specific strategies used in presenting the literature review. This review is the foundation for understanding variables influencing IPV. A comprehensive understanding of the theoretical framework is presented as the basis for the study. The ways attachment theory has been applied in previous research was considered. Attachment theory has been used as the basis for understanding behaviors, including IPV, and justification for said choice is provided. The other theories used are presented, along with their limitations, as these were evidence attachment theory was an appropriate framework. Following this justification is a discussion about the available research related to the variables.

An exhaustive review of relevant research was used to identify the research gap regarding IPV in the military. Research regarding attachment styles, PTSD, TBI, and IPV within the military is presented. The research is used as evidence a gap exists, justifying the need to continue studying IPV within the military. Finally, the lack of research relating attachment styles, PTSD symptomatology, TBI, and IPV with another is discussed.

Literature Search Strategy

Limited research is available on the relationship between attachment styles, PTSD, TBI, and IPV in military couples. Psychological databases, including those relevant to military research, were chosen for gathering relevant research regarding attachment styles, PTSD, IPV, and TBI. Peer-reviewed journal articles were used as the major source of research reviewed for Chapter 2. Databases used included Academic Search Complete, PsycARTICLES, PsycINFO, Science Direct, Taylor & Francis, and SAGE Premier. Aside from these databases, specific search engines were used. These search engines included Google Scholar, Research Gate, and Google Books. Within these databases and search engines, certain terms or keywords were used to develop a meaningful literature review on the aforementioned topic, highlighting the research gap.

The search terms or keywords used for the literature review were *intimate partner violence, IPV, domestic violence, DV, domestic abuse, partner aggression, partner abuse, intimate partner aggression, IPA, family violence, relationship violence, battering, courtship violence, spousal abuse, military, veteran(s), soldier(s), posttraumatic stress disorder, PTSD, posttraumatic stress, aggression, attachment, attachment style, interpersonal relations, relationships, mental disorder, mental illness, psychological disorder, psychological illness, combat, deployment,* and *alcohol*.

Most research considered for the literature review was published between 2012 and 2017. Data where little research had been conducted, along with seminal articles from previous years, were included. Seminal works focused on the theoretical foundation were included to provide guidance on the influence attachment has on relationships.

Despite the literature review's scope and inclusion of seminal works, considerations were made for instances where little research was available.

While extensive research was available to guide the study, research specifically addressing the relationships between attachment styles, PTSD, and IPV was lacking. A lack of research specific to the variables together was handled by evaluating research on the variables individually. Locating research articles focusing on two key variables at a time was another way insufficient research was addressed. The research available on these topics is included within the literature review, beginning with research specific to the theoretical foundation.

Theoretical Foundation

The theoretical foundation used was Bowlby's (1958) attachment theory. Attachment theory is derived from both behavioral and genetic theories (Ainsworth, Blehar, Waters, & Wall, 2015). The theory is considered a useful guide for further research on human behavior (Ainsworth et al., 2015). Attachment theory is a valid base for research into violent behaviors, such as IPV. The ideas within the theory can be used when working with couples who are at risk for behaving violently. Attachment theory is based on security theory, which is an understanding of the relationship between a child feeling secure, becoming independent, and feeling safe in exploring the world (van Rosmalen, van der Horst, & van der Veer, 2016). Security theory's evolution led to many research contributions, including understanding the ways in which attachment styles influence human behavior.

Before attachment theory was a formal psychological theory, it was hypothesized proper care from parents is an essential part of mental health throughout a person's life (Bowlby, 1952). Determining the role a person's parents and life experiences play is key when understanding development, even past childhood. Bowlby asserted an individual's experiences during childhood are the foundation for psychological issues throughout life (Bretherton, 1992). Researchers can understand the relationships between attachment styles and PTSD, possibly gaining insight into the roles these factors play in IPV. Bowlby (1980) suggested individuals with caring mothers are more secure. These individuals are seen as more capable when dealing with stress or loss (Bowlby, 1980).

Many aspects of personality development, including resiliency, can be understood using attachment theory, despite the research's rough beginnings. The methods of early studies on attachment were somewhat controversial because children were placed in a state of distress (Bowlby, 1976). The work on attachment, however, has provided the background for many research breakthroughs in the decades since (Bowlby, 1976). Propositions about attachment's research history are helpful to understanding the ways attachment theory has been applied to other studies on human behavior, especially those focused on intimate relationships. Attachment styles are not always the same in relationships, and how the styles interact with one another could provide an understanding regarding attachment's influence on interpersonal relationships.

Different attachment styles have a unique influence on both a couple's dynamics and their stress reactions. Even securely attached individuals may respond like individuals with an insecure attachment style in some relationships (Beck, Pietromonaco,

DeBuse, Powers, & Sayer, 2013). The influence attachment styles have should be considered when evaluating couples involved with IPV. The interaction effects are evidence of the need to further understand the impact attachment styles have on relationships and resilience. Those with an anxious attachment style may be more likely to disengage from conflict, negatively impacting their relationship (Barry & Lawrence, 2013). This was considered when there was an interaction of attachment styles in the relationship (Barry & Lawrence, 2013). While these differing attachment styles can have a negative influence on interpersonal relationships, attachment style may be a positive aspect of a person.

A person's attachment style is an influence on how he or she copes with interpersonal stress. Whereas research is indicative insecure attachment styles may be cited to explain negative aspects of relationships and personality development, secure attachments have the opposite effect. Individuals with secure attachments are more resilient in stressful situations (Karakoç et al., 2015). Insecure attachment styles correlate with developing psychological disorders (Karakoç et al., 2015). The unique relationships attachment styles have with mental illness were justification for using attachment theory as the framework for this study.

Attachment theory is an explanation for relationship changes occurring after veterans develop PTSD, including military spouses developing trauma symptoms (Campbell & Renshaw, 2016). The roles specific attachment styles play in relationship changes represent another issue under consideration. For those seeking to understand these behaviors, including IPV, attachment theory is only one possible perspective from

which to view this problem. Researchers have investigated IPV through the lens of many different theories in previous studies.

Other theories on behavior, including biological theories, psychological theories, social disorganization theories, and feminist theories have been used as ways to understand IPV. Studies using these theories must be considered, as their strengths and weaknesses were useful in justifying the use of attachment theory. These theories were too narrow to inform either prevention or intervention efforts (Murphy, Norwood, & Poole, 2014). The assertion other theories are too narrow was evidence more research is required (Murphy et al., 2014). Studies using these theories as their background have lacked empirical evidence (Holt & DeVaney, 2016). Understanding how other theories have been applied helps in developing an understanding of how to best address relationship violence in future studies.

Biological views of human behavior represent one set of theories researchers have used in the past to understand IPV. Biological theories are an explanation for violent behavior using evolution as the background (Alvarez & Bachman, 2014). One explanation is that males are violent toward their spouses when jealous (Belsky, 2016). Males are violent, in other words, when protecting their interest in reproducing (Belsky, 2016). Biological approaches are discounting a man's ability to control his emotions, or any incidents where the woman is the aggressor.

Feminist theory is another theory which has been used to understand IPV committed by males. The theory is an explanation of violent behaviors in relationships as learned behaviors (Newman & Iwi, 2015). The behavior is often based in power and

involves a need to control females (Newman & Iwi, 2015). Provided within feminist theory is an explanation like the one provided in biological theories. While these theories are both explanations for why men are violent toward women, there is no consideration for other factors playing a role. Given the flaws in these theories, researchers have used psychological theories when investigating IPV.

Psychological views on IPV are indicative violent behaviors, whether they occur within intimate relationships or not, result from trauma during childhood (Holt & DeVaney, 2016). Engaging in IPV could simply be a reaction to a violent or unstable upbringing. Another view is suggestive of the idea psychological illness is related to interpersonal violence, with the behavior being an unhealthy way to cope with life's stressors (Corvo & Johnson, 2013). These different explanations for violence, using similar theories, are further evidence IPV is a complex social issue. The complexities are suggestive of the need to look at violent behavior from multiple angles.

Social disorganization theory is another framework previously used when researching IPV. Social issues, such as poverty, living in an immigrant community, and living in urban areas have all been correlated with IPV (Blumenstein & Jasinski, 2015). Researchers using social disorganization theory found a relationship between neighborhood culture and IPV (Beyer, Wallis, & Hamberger, 2015). Although social disorganization may be an explanation for IPV on a macro level, individual factors must be considered.

Although many explanations are provided by these theories, none are comprehensive enough to furnish a full understanding of IPV. The theories conflict with

one another about the variables causing IPV. Based on the conflicting evidence, one theory alone cannot be accepted as the best explanation for violent behaviors (Wallace & Roberson, 2015). Given the lack of success understanding why IPV happens, using attachment theory while considering other factors can yield a more comprehensive understanding of interpersonal violent behavior. Attachment theory involves the use of multiple theoretical angles to explain behavior (Ainsworth et al., 2015). Attachment theory's current use for addressing interpersonal issues within couples was another reason this theory was deemed appropriate for use in this study.

Researchers interested in therapeutic methods for addressing IPV have found interventions focused on altering attachment styles can change how the members of a couple interact with one another (Dekel, MacDermid Wadsworth, & Sanchez, 2015). Using an attachment approach might lower IPV prevalence in military couples while providing them with healthier stress management methods. The way people with insecure attachments overcome traumatic events is not adequately understood, creating the need for more research addressing attachment and therapeutic methods (Bryant, 2016). By understanding the impact different attachment styles have on IPV, it is possible to address this research gap. Such an understanding could inform treatment for those who have experienced trauma, including soldiers who have engaged in combat deployments.

Secure attachments starting from childhood are a buffer against the negative effects of trauma, and they can improve a person's health, both physically and mentally (Simpson & Tran, 2013). Individuals with secure attachment styles might be healthier

than those with insecure attachment styles. This assertion is further justification for using therapeutic methods to alter insecure attachment styles. Even though attachment theory is a useful method for guiding therapy, more research should be done to ensure related methods are effective (Bucci, Roberts, Danquah, & Berry, 2015). Approaching attachment as an evolving aspect of personality throughout a person's life enhances the understanding of human behavior.

Looking at IPV from the perspective of being able to alter attachment styles is expected to benefit research on violent behavior (Tsai, 2013). Tsai (2013) determined such a method is effective when considering intervention improvements come from understanding negative events in someone's life, going back to childhood. Aside from incidents during childhood, events altering the attachment style of an individual can influence stress management methods. The changes might alter the relationships one has with others. Attachment theory is the suggested method for understanding the effect unique experiences of the military lifestyle have on interpersonal relationships (Tasso, Whitmarsh, & Ordway, 2016). The method is suggested for understanding IPV occurring within military couples (Tasso et al., 2016). Further evaluation of research on attachment, including other relevant concepts, sheds light on why attachment theory was the best choice for the foundation of this study.

Literature Review Related to Key Variables

The available research on attachment theory, along with its relevance to understanding IPV, was support for using this construct. Other research on the constructs of interest was support for the need to conduct more studies, using quantitative methods.

Many variables, including young age, alcohol abuse, personality disorders, inadequate social support, and lower income levels are correlated with violent behavior (Okuda et al., 2015). A benefit to studying violent behaviors with quantitative methods is obtaining evidence on how many variables are correlated with IPV. Combat exposure and TBI have been found to increase the chances couples will engage in violent behaviors (Williston, Taft, & VanHaasteren, 2015). These findings are suggestive risk factors for IPV include military-specific events. This was support for the need to include PTSD symptomatology and TBI in research. Quantitative methods allowed for consideration of these different variables in a way the results will be generalizable to the military population, while approaching the subject objectively.

The ways researchers previously approached IPV shed light on some correlates of violent behavior. Strengths and weaknesses of their approaches must be considered, though. Witnessing domestic violence during childhood is correlated with being a victim or a perpetrator in adulthood (Fonseka, Minnis, & Gomez, 2015). Childhood experiences are correlated with violent behavior, with other factors influencing this relationship (Fonseka et al., 2015). Individuals who experienced emotional abuse during childhood are at risk for being involved in IPV (Bell & Higgins, 2015). There is a lack of research into emotional abuse as a risk factor when compared with research on other types of childhood abuse and violence in adulthood, though (Bell & Higgins, 2015). The lack of research remains an issue, making it a weakness. Protective factors must be considered, because children who witness IPV can still develop healthy relationships throughout their lives (Benavides, 2015). This occurs when support is provided to them from a young age

(Benavides, 2015). The impact other variables have is another reason the correlations with IPV require a more comprehensive understanding.

Another risk factor for IPV in military couples is excessive masculinity (Klaw, Demers, & Da Silva, 2016). Notions or expectations about masculinity in the military play a role in IPV (Reidy, Berke, Gentile, & Zeichner, 2014). Masculinity ideals should be considered, because gender roles are an influential variable in IPV risk. A complication with the relationship is adapting to masculinity norms in the military, as the issue can cause psychological distress (Alfred, Hammer, & Good, 2014). Soldiers upholding masculinity ideals could be at higher risk for experiencing PTSD symptoms, an important factor given the statistics about men engaging in IPV as the perpetrator.

Researchers noted men are often the perpetrators in IPV, which was suggestive gender plays a role in understanding violent behaviors and creating effective interventions (Hamberger & Larsen, 2015; Fleming, Gruskin, Rojo, & Dworkin, 2015). Further support of gender roles relating to IPV is provided by Walsh, Spangaro, and Soldatic (2015), who asserted violent behaviors could be framed in terms of marriage roles and families. Practitioners should consider how masculinity influences IPV in military couples, given military cultural expectations regarding behavior. Threatening an individual's masculinity can cause stress, potentially leading to aggressive outbursts toward intimate partners (Baugher & Gazmararian, 2015). The correlation gender has with IPV does not equal causation, though. This is one reason to continue studying the variables possibly influencing IPV. Not finding causes for IPV behaviors is a weakness within these studies.

More effective interventions, for any population experiencing interpersonal violence, can be created by considering the complex nature of IPV (Burge et al., 2014). Looking at IPV from more than one angle might increase the effectiveness of interventions, or be help with creating effective prevention programs. The dynamics in each intimate relationship are unique. Why interventions do not work universally could be understood by focusing on differences in couples (Burge et al., 2016). Given these studies, along with others presented, justification was provided for a study where the relationships between attachment styles, PTSD, TBI, and IPV were evaluated.

Attachment Style

When looking to understand IPV, one consideration is whether attachment style plays a role in violent behavior. Women with insecure attachments are at an increased risk for being involved in IPV, as the victim or aggressor (Karakurt, Silver, & Keiley, 2016). Women in military relationships could be at risk if they do not feel securely attached with others. Anxious attachment style is correlated with IPV when the person has a traumatic history, which is further evidence a relationship exists between attachment styles and IPV (Smith & Stover, 2016). Individuals with secure attachments were not as traumatized, even when they experienced IPV (Smith & Stover, 2016). Less traumatization is suggestive attachment styles either promote resilience or increase the risk of an individual being involved in IPV.

Anxious and avoidant attachment styles are related to IPV, with unhealthy conflict resolution skills influencing the relationship (Bonache, Gonzalez-Mendez, & Krahé, 2016). Improving coping skills or promoting secure attachments to others might help

with preventing future violence. Other factors, such as personality traits or personality disorders, are influential to the relationships between attachment styles and IPV (Cameranesi, 2016). Researchers investigating IPV should consider how attachment styles can influence the development of psychological disorders, such as PTSD.

PTSD. The impact attachment styles have on PTSD development was investigated. Anxiously attached participants reported experiencing more symptoms (Ferrajão & Oliveira, 2015). These symptoms could be addressed by promoting secure attachments (Ferrajão & Oliveira, 2015). These assertions could be based in issues existing prior to the subjects developing PTSD or the tools used to measure attachment styles and PTSD though, without considering other factors related to interventions designed to address the symptoms. There is evidence securely attached individuals report fewer symptoms of psychological disorders, but whether participants were symptomatic during data collection is unknown (Palitsky, Mota, Afifi, Downs, & Sareen, 2013).

Insecure attachments later in youth are correlated with experiencing mental illness symptomatology during adulthood (Pascuzzo, Moss, & Cyr, 2015). Other researchers supported these assertions with their findings avoidant attachment is correlated with developing PTSD symptoms (Horesh, Cohen-Zrihen, Ein Dor, & Solomon, 2014). A noted limitation was a lack of understanding regarding the participants' attachment styles before the study (Horesh et al., 2014). The participants' attachment styles may have altered at some point. Soldiers who experience combat might lose trust in the world, developing an avoidant attachment style after deployment to control PTSD symptoms (Horesh et al., 2014). Trust loss could be addressed using evidence based interventions.

These studies should be considered when evaluating relationships between attachment styles and mental disorders, such as PTSD.

Individuals with avoidant or anxious attachment styles experienced more PTSD symptoms than those with secure attachment styles (Busuito, Huth-Bocks, & Puro, 2014). These results are suggestive secure attachments are the only style not correlated with developing PTSD, depending on whether three or four attachment style classifications are considered. Measurement issues, including whether attachment issues or PTSD symptoms presented first, are indication results may not be representative of the relationships between these variables (Busuito et al., 2014). Of the different attachment styles, fearful avoidant attachment has the highest correlation with PTSD (Woodhouse, Ayers, & Field, 2015). Whether the instruments were measuring the avoidance related to PTSD or avoidant attachment style remains unknown (Woodhouse et al., 2015). Given the different findings, other variables should be considered when attempting to understand why some soldiers develop PTSD and others do not, such as childhood neglect.

Childhood neglect is associated with developing anxiety disorders, such as PTSD (Schimmenti & Bifulco, 2015). Anxiety disorders have a negative impact on future interpersonal relationships (Schimmenti & Bifulco, 2015). Those who experience adversity in childhood might be more susceptible to developing PTSD. The symptoms can be a cause of more relationship problems. Despite this assertion, relationships were found between traumatic events during childhood and depression, but not PTSD (Rudenstine et al., 2015). The conflicting findings are evidence more should be

understood about the influence attachment styles have on mental health and interpersonal relationships. A connection exists between insecure attachment styles and developing psychopathology (Mikulincer & Shaver, 2012). Practitioners would be informed of the best ways to approach patients exhibiting symptoms if they understood PTSD development more.

Childhood abuse is another consideration, because traumatic events can shape a child's view on relationships, lead to being a victim of violence throughout ones' life, and provide an understanding of the individual's perception during interventions or treatment programs (Brown, Burnette, & Cerulli, 2015). Considering childhood experiences, especially abusive ones, would help practitioners understand the most effective way to approach these individuals. These experiences might influence interpersonal relationships. Traumatic childhood experiences can interfere with identity development, where the child may no longer have control over their emotions or feel trust and comfort from relationships with others (Ford, Grasso, Elhai, & Courtois, 2015). The trauma during childhood could be influential to many aspects of a person's life, including how well he or she overcomes stress, relates with others, and his or her susceptibility for developing psychological illnesses. Trauma experienced during childhood is influential to relationships later in life, as it is correlated with angry outbursts or aggression within intimate relationships (Steven Rholes, Paetzold, & Kohn, 2016).

When evaluating military families, including determining the ways soldiers deal with combat-related trauma, whether experiences during childhood influence their reactions to these traumatic events should be considered. A complex relationship exists

between childhood abuse and internalizing feelings about military-specific trauma (Whelan, 2015). Internalizing feelings could impact willingness to engage in therapeutic programs (Whelan, 2015). Practitioners understanding the relationship between trauma and internalizing emotions would be better prepared to help soldiers who experienced traumatic events. How an individual perceives traumatic events is essential to determining the impact attachment styles have on developing PTSD symptoms.

Individuals with an anxious attachment style may perceive traumatic events differently, leading to the event having a larger impact on them (Ogle, Rubin, & Siegler, 2016). These individuals could be at risk for more symptoms developing (Ogle et al., 2016). Whether an individual has appropriate coping skills is another aspect under consideration. Individuals with secure attachment styles might feel more capable of overcoming stress or dealing with trauma (Mikulincer & Shaver, 2013). Those with insecure attachment styles have less coping skills, are less resilient, and are more emotionally imbalanced (Mikulincer & Shaver, 2013). The traits specific to certain attachment styles should be considered when evaluating risk for developing psychological disorders. This evaluation could help practitioners further understand disorders with symptoms that might lead to violence towards others. These traits could be the reason an individual chooses the military lifestyle.

One relationship to consider with attachment styles and military experiences is whether childhood influences the choice to join the military. Those with traumatic childhoods, especially females, may be more inclined to join the military (Katon et al., 2015). These individuals are more likely to lack the coping skills necessary to overcome

stressful military experiences (Katon et al., 2015). The motivation to join the military to remove oneself from a traumatic environment could place female soldiers at a higher risk for developing PTSD when they are exposed to traumatic events during deployment. The relationship regarding enlistment choices exists for both genders, as their choice is correlated with experiencing abuse during childhood (Afifi et al., 2016). Researchers should consider other aspects of PTSD, including how the disorder is correlated with IPV, regardless of an individual's attachment style.

PTSD

Considering the impact PTSD has on interpersonal relationships is one way to understand IPV, but practitioners must understand symptom development in soldiers. Soldiers who experienced trauma are more likely to develop PTSD after combat deployments, but other variables might impact the relationship (Xue et al., 2015). Based on these results, more needs to be known about PTSD development. Delayed development, or not meeting diagnostic criteria for PTSD, complicates understanding what variables place a soldier at a higher risk for developing the disorder (Bruenig, Morris, Young, & Voisey, 2015). United States veterans who deployed to combat theaters in Iraq and Afghanistan report similar PTSD symptom levels, depression, and aggressive behaviors after deployment (Afari et al., 2015). Soldiers who engaged in combat deployments report anger and aggression as being the most prevalent PTSD symptoms they experienced (Wilk, Quartana, Clarke-Walper, Kok, & Riviere, 2015). These symptoms could lead to unhealthy behaviors, such as, violence toward one's spouse.

Understanding the impact PTSD symptomatology has on soldiers may be help with justifying why the disorder should be considered in IPV studies. Soldiers diagnosed with PTSD have higher IPV rates, represent a significant number of soldiers who are incarcerated, and possess fewer interpersonal skills (Church & Brooks, 2014). Which symptoms are related to violence, or other antisocial behaviors is unclear. Many PTSD symptoms are correlated with violence when studied alone, but these correlations are no longer significant when other variables are considered (Sullivan & Elbogen, 2014). These results are suggestive variables, such as attachment styles or TBI, would change how PTSD symptoms are correlated with IPV. Impulsiveness mediating the relationship between symptoms and aggression toward others is further evidence regarding the complex relationship PTSD has with violent behaviors (Heinz, Makin-Byrd, Blonigen, Reilly, & Timko, 2015).

The way couples interact with one another when one of them has PTSD should be a factor used to determine whether interpersonal conflicts escalate. In couples where the spouse experiences high PTSD symptom levels, more aggressive behaviors occur, and the couple is less likely to use humor to diffuse conflict (Miller et al., 2013). Within these couples, increased hostility levels are shown, more negative behaviors occur, and less positive behaviors are used to reconnect the couple (Knobloch-Fedders, Caska-Wallace, Smith, & Renshaw, 2017). The negative behaviors might be due to a lack of coping skills, or the couple's inability to find healthy ways to deal with stress. Military spouses could realize his or her soldier is experiencing symptoms, and the spouse's behavior during familial interactions might be a reaction to the soldier's behavior

(Brockman et al., 2016). Brockman et al. (2016) noted the symptoms could be different based on the unique deployment experiences. Some soldiers witness violence, finding themselves in ethical dilemmas, while others do not experience traumatic events (Brockman et al., 2016). The symptoms developing after deployments depend on the perception of what happened during deployment.

Some soldiers who deploy, even those who experience traumatic events, view the experience as positive (Yehuda, Vermetten, McFarlane, & Lehrner, 2014). These soldiers may even look forward to returning to combat (Yehuda et al., 2014). The differing reactions to combat deployments need to be better understood if practitioners want to prevent soldiers from developing mental illnesses afterwards. Further support of the diverse reactions to combat deployments is evident, as for some soldiers the experience is associated with PTSD, depression, and suicidality (Cesur, Sabia, & Tekin, 2013). Combat experiences are heterogeneous, leaving deployment effects unique for each soldier.

One aspect of combat deployments possibly impacting PTSD symptomatology development is what happens during deployment, such as committing acts against the soldier's moral code (Watkins, Sudom, & Zamorski, 2016). Watkins et al. (2016) determined considering the unique events during deployment can inform treatment programs. What occurs during a deployment influences whether soldiers develop PTSD symptomatology, or if they view their experience as being good. IPV in military couples is a complex issue, as there are correlations between engaging in combat and IPV (Vinck & Pham, 2013). Those who commit these acts often show PTSD symptoms and

depression (Vinck & Pham, 2013). Not all those who engage in combat or have PTSD are at risk for IPV, so more research can shed light on specific variables impacting the relationship.

PTSD and depression are often co-occurring disorders (Gonzalez, Novaco, Reger, & Gahm, 2015). Reported anger levels are higher for veterans with symptoms of both disorders (Gonzalez et al., 2015). Comorbidity is another issue seen when evaluating veterans who are at risk for IPV. Adding to the complexity is the deployment cycle itself, which is influential to developing posttraumatic stress symptoms (Interian, Kline, Janal, Glynn, & Losonczy, 2014). Soldiers with more deployments are more susceptible to developing psychological disorders (Interian et al., 2014). Home-related stress could increase this risk (Interian et al., 2014). The continued deployment cycle can influence a family's ability to overcome stress in a healthy manner. The impact deployments and PTSD have on familial relationships is further understood from their perspectives.

Qualitative studies on PTSD have been conducted to determine the impact the disorder has on interpersonal relationships. Veterans with PTSD symptoms report not communicating well and being angry (Mansfield, Schaper, Yanagida, & Rosen, 2014). These behaviors often made their partners feel distressed (Mansfield et al., 2014). The anger and communication issues should be considered in prevention or intervention programs, because these behaviors can negatively impact relationships. Soldiers report needing to create meaning about events they witnessed or engaged in during deployment (Brenner et al., 2015). Whereas some felt distressed, others were strengthened by the

experience (Brenner et al., 2015). These mixed findings are evidence more research should be done to understand variables influencing IPV in military couples. Another aspect is the diagnosis itself, as there are mixed findings on PTSD as a psychological disorder.

While some policymakers assert PTSD is over diagnosed within the military population, others feel the opposite (Fisher, 2014). The stigma surrounding the diagnosis can create difficulties with receiving treatment (Fisher, 2014). The impact PTSD has on behavior and interpersonal relationships is not understood well enough. Further complicating the issue is the way military trauma is classified the same way civilian trauma is within the current diagnostic manual (Langan, 2017). Other criticisms surrounding PTSD include the stigma related to being classified as mentally disordered in the military (Smith & Whooley, 2015). This stigma often leads to soldiers refusing to seek help when they experience symptoms (Smith & Whooley, 2015). Not seeking help might be a reason the stress effects are so prominent in military samples, as soldiers are not willing to address behavioral problems before they interfere with interpersonal relationships.

Even when a soldier is assessed for psychological disorder symptomatology, he or she may not feel comfortable receiving help (Pietrzak et al., 2015). The stigma related to mental illness, even against those who served their country, decreases a veteran's chances for success after their service (Hipes, Lucas, & Kleykamp, 2015). Stigma is an influence on the chances of receiving help, impacting the risk a veteran is at for becoming more unstable due to PTSD symptoms. In cases where veterans are not receiving help for their

symptoms, a researcher should consider the impact of alcohol consumption.

Alcohol. Among soldiers who are deployed, especially those who experience PTSD symptoms, coping mechanisms used to deal with traumatic experiences are another factor to consider. In men and women exposed to combat during deployment, more male veterans use alcohol to cope with PTSD symptoms (Kelley et al., 2013). As a coping mechanism, alcohol use is not the healthiest method for dealing with trauma. The findings are indicative of gender differences related to coping with stress. Soldiers with alcohol problems and PTSD symptomatology reported more aggressive behaviors (Elbogen et al., 2014). Either PTSD or the alcohol use could be the cause of the violent behaviors, or other factors may have contributed to the situation.

While evidence exists supporting the idea alcohol is used as a coping mechanism, researchers have considered specific PTSD symptoms associated with alcohol use. Symptom clusters, such as avoidant and hyperarousal, are more significantly associated with abusing alcohol, with the caveat more research is needed (Debell et al., 2014). Given these findings, those who have symptoms from other clusters may not use alcohol as a coping mechanism. Another factor influencing alcohol use and PTSD could be the symptom severity, as those who experience more severe symptoms drink more at night (Gaher et al., 2014). Drinking may be a way to cope with the symptoms, or be related to the individual's inability to regulate his or her emotions (Gaher et al., 2014). Daily drinking is correlated with the symptoms a person experienced during the day (Simpson, Stappenbeck, Luterek, Lehavot, & Kaysen, 2014). Considering the evidence PTSD and alcohol use are related, there is a chance the documented relationship might influence

IPV in military couples.

Another aspect of the relationship between PTSD and alcohol is how the two interact with one another, possibly encouraging aggressive behaviors. When the individual experienced few symptoms and abused alcohol, they were more emotionally aggressive (Stappenbeck, Hellmuth, Simpson, & Jakupcak, 2014). Alcohol problems are associated with violence regardless of alcohol abuse (Stappenbeck et al., 2014). The relationship between PTSD and alcohol abuse must be considered, as this may be a mediating factor. Drinking and aggression are related, even when a person was not experiencing the symptoms of a psychological disorder (Testa & Derrick, 2014). These studies are evidence of the heterogeneous nature of both IPV perpetrators and those who abuse alcohol.

Researchers investigated the influence different military experiences have on the likelihood a soldier will develop drinking problems (Liew, 2016). As each soldier has a different experience, with a different interpretation of the experience, other individualized factors should be considered. One factor could be determining if the soldier is at risk for developing a drinking problem, including how alcohol use might be related to PTSD symptomatology. Another factor is the influence of attachment styles, including their relationship with PTSD.

Attachment style. Another variable to consider when evaluating these complex relationships is whether attachment issues predated developing PTSD. This is pertinent because attachment style could influence the development of PTSD. In a mediation analyses on factors impacting the relationship between PTSD and attachment, attachment

was found to be a risk for developing the disorder (Ortigo, Westen, DeFife, & Bradley, 2013). The found relationship was impacted by other variables, though (Ortigo et al., 2013). The issues correlated with developing PTSD might be related to attachment issues.

Those with insecure attachments are at higher risk for developing PTSD when they experience trauma later in life (Ogle, Rubin, & Siegler, 2015). Insecure attachments often stem from incidents occurring during childhood (Ogle et al., 2015). Based on these relationships, attachment insecurity can be a precursor for developing PTSD. Children who experience trauma without proper support from parents are at risk for developing insecure attachment styles, PTSD, or both (Bryant et al., 2017). Attachment to one's parents during adolescence can be a contributor to the risk for developing mental illness in adulthood, but romantic attachments later in life are not (Pascuzzo et al., 2015). The attachment style prior to trauma is an influence on the development of PTSD again. The results might be skewed, based on the measurement tools used or the overlap between attachment issues and PTSD symptoms previously found.

When measuring PTSD symptomatology and considering the disorder's impact on relationships, practitioners should consider whether the measurement instruments are providing an accurate depiction of the situation. The relationship between PTSD symptoms and attachment varies depending on the measurement tools used when collecting the data (Woodhouse et al., 2015). Questions about PTSD symptoms and insecure attachment styles are worded similarly (Woodhouse et al., 2015). The wording is indication increased reporting of PTSD symptoms could be related to attachment

issues. The lack of understanding about how these variables interact with one another is reason to continue research into PTSD. When considering PTSD, TBI can be a concern for soldiers who went on combat deployments, given the overlapping symptoms (Bremner, 2016).

TBI. Deployed soldiers are at increased risk for developing PTSD if they experience a TBI during combat (Saxe & Perdue, 2015; Stein et al., 2015). PTSD symptom scores were higher for soldiers diagnosed with mild TBI (Troyanskaya et al., 2015). TBI diagnosis is difficult while on deployment, as the similarities between the two conditions can create confusion on the appropriate treatment method for the soldier (Hooker & Moore, 2015). Overlapping symptoms include depression, anxiety, impulsivity, difficulties with memory or concentration, and sleepiness (Boehnlein & Hinton, 2016). The validity of TBI diagnosis is questioned, as the requirements for diagnosis are considered too low (Elder, Stone, & Ahlers, 2014). Experiencing an explosion during combat may be related to either condition, as being blown up can be a traumatic experience (Elder et al., 2014). Considering the low threshold for diagnosis, individuals who barely meet the requirements for TBI might have PTSD. Improper treatment could be administered if the diagnosis is incorrect.

Distinguishing between PTSD from TBI is essential, because the overlapping symptoms could lead to improper treatment (Raji et al., 2015). Current treatments for PTSD are not effective for individuals with TBI (Raji et al., 2015). Practitioners need to understand how to distinguish between these two conditions to effectively provide therapeutic services for both. Either condition can result from head injury, because

changes to the brain structure may increase the chance a soldier develops PTSD (Boehnlein & Hinton, 2016; Tschiffely, Ahlers, & Norris, 2015). Given the causal link found, TBI is important to consider when military couples engage in IPV. Not enough is known about how TBI is related to PTSD, as scores on diagnostic instruments are similar for both conditions (Walker, McDonald, & Franke, 2014). A greater understanding about the differences between these two conditions could help distinguish them from one another.

Either condition may be from trauma or physiological brain changes (Tschiffely et al., 2015). The conditions each have aspects making them unique, though (Tschiffely et al., 2015). The varying causes of these two conditions makes understanding them individually and together essential to determining their impact on mental health. When studying those who have PTSD, with and without TBI, researchers found risky and impulsive behaviors at higher levels are associated with PTSD (James, Strom, & Leskela, 2014). These behaviors being present in those with PTSD symptoms, whether they had TBI or not, are indication the behaviors are specific to PTSD.

Another aspect is whether those who have TBI benefit from treatment plans specifically designed for PTSD. Soldiers with TBI exhibiting PTSD symptomatology, but not enough for a diagnosis, benefit from treatment when the symptoms are from the hyperarousal category, such as anger, impulsivity, and aggression (Miles, Graham, & Teng, 2015). Miles et al. (2015) noted the relationship can be predictive about other issues, such as alcohol abuse. These relationships are further indication of the complex effects these conditions have on relationships and functioning, including IPV.

IPV in the Military

IPV is a significant social issue impacting military couples at a higher rate than civilian couples (Adejimi, Fawole, & Sekoni, 2015). Being in the military and being exposed to IPV during childhood are predictors of violent behavior in relationships (Adejimi et al., 2015). The complexities of relationship violence should be studied to prevent future incidents. Trauma related to combat deployments and PTSD is correlated with aggressive behaviors expressed by military personnel (Hecker, Fetz, Ainamani, & Elbert, 2015). These aggressive behaviors can be toward family, which means understanding the influence PTSD symptomatology has can help enhance programs used with the military population. Relationships between trauma and violence have been found, with evidence family members might avoid their veteran, fearing aggressive outbursts (Zerach, Solomon, Horesh, & Ein-Dor, 2013).

Avoiding the veteran is one behavior associated with IPV in military couples, but is only one part of the problem. Couples verbally abusing one another may isolate themselves to keep relationship problems private (Copel, 2015). Copel (2015) noted when couples start with verbal abuse only, the behavior might escalate to physical abuse. These behaviors are correlated with PTSD (Copel, 2015). While many studies where IPV was investigated used military populations, other studies with relevant findings were conducted using civilian populations.

Many researchers investigating IPV did not use military couples, but still identified possible causes for interpersonal violence. Different variables, including depression, anger, alcohol or drug abuse, growing up in violent households, PTSD

symptomatology, and personality disorders are correlated with IPV (Dutton, Tetreault, Karakanta, & White, 2014). These varying causes are evidence of how complex relationship violence is, and are indication more understanding is needed about couples who engage in these behaviors. Evidence is suggestive variables, such as difficulties with sleep and being in pain, mediate the relationship between PTSD symptomatology and aggression within relationships (LaMotte et al., 2017). Personality factors and antisocial behaviors are among the leading causes for violent behavior (Das, Alam, Bhattacharyya, & Pervin, 2015). Violent behavior is correlated with cultural ideas about men being in charge, economic problems, and other issues (Das et al., 2015). These findings are further support IPV is a complex social issue, with the need for individualized programs.

While a relationship exists between PTSD and IPV in military populations, not all soldiers who develop symptoms behave aggressively (Van Voorhees et al., 2014). Other influences should be examined to understand IPV, based on the differing reactions from soldiers with PTSD. In some cases, violent behaviors by those experiencing PTSD are considered defensive, such as when the individual experiences flashbacks (Miller, 2012). Practitioners must consider whether PTSD symptoms make the soldier a danger to themselves or others.

Another factor under consideration is how PTSD symptoms impact a couples' ability to cope with stressors. Couples where the soldier displayed PTSD symptoms are involved in more violent behaviors when there are differing loci of control, a lack of understanding, or the couple lacks respect for one another (Gerlock, Grimesey, & Sayre,

2014). Couples who cannot overcome the obstacles related to the military lifestyle and PTSD symptomatology might be at a higher risk for violent behaviors. Researchers discovered a small relationship between PTSD and antisocial behavior (Sherman, Fostick, & Zohar, 2014). The disorder may not be related to violence based on these results (Sherman et al., 2014). Conflicting findings are evidence more research is needed on variables influencing the relationship between PTSD and IPV in military samples.

Alcohol use is another variable to consider, as drinking problems are consistently related to abuse within relationships (Leone, Crane, Parrott, & Eckhardt, 2016). When evaluating the relationship between these two variables, impulse control could be a mediating factor (Leone et al., 2016). Using alcohol as a means of coping with stress, and subsequently behaving aggressively toward one's partner is another consideration, especially given the association between alcohol use and PTSD. Other researchers using qualitative methods found alcohol is a risk factor for IPV (Wilson, Graham, & Taft, 2016). These findings were an indication drinking is a cycle correlated with violence against female partners (Wilson et al., 2016). In quantitative studies on the influence alcohol has on IPV, the findings were indicative alcohol abuse was correlated with severe violence levels (Messing, Mendoza, & Campbell, 2016). The correlation is suggestive relationships between alcohol and abuse are only present when alcohol consumption is at the misuse level. Even with these assertions about the risk factors for IPV, methodological issues in studies must be considered, as they impact the reliability of the results.

Nondisclosure and samples sizes in past research limit the generalizability of results. Disclosure is influenced by PTSD symptomatology, how comfortable a person feels about his or her relationship, or their locus of control about relationship problems (LaMotte, Taft, Reardon, & Miller, 2014). The civilian in the relationship is often the aggressor, rather than the veteran, but overall agreement levels about violence within relationships are low (LaMotte, Taft, Weatherill, Scott, & Eckhardt, 2014). The lack of comfort about discussing private affairs, or certain PTSD symptoms, may limit disclosure. Limited disclosure impedes creating understanding about variables influencing IPV. While there is evidence a relationship exists between PTSD and IPV, the samples used in these studies are questioned as being insufficient (Crane, Hawes, Devine, & Easton, 2014). Aside from methodological issues, research where the sample is not representative of the military population should be considered, due to the threat to external validity.

In other studies, where military participants were only women, the results might not be representative of the entire population. Certain aspects of military service increase a woman's risk for being involved in IPV, elevating her risk for vulnerabilities associated with being a victim (Dichter, Wagner, & True, 2015). These risk factors include drug abuse, unemployment, or mental illness (Dichter et al., 2015). With a female sample, the results are not generalizable to the military population. Female soldiers are more often IPV victims than males (Mota et al., 2012). They are more likely to have witnessed IPV as children (Mota et al., 2012). These relationships are further support regarding the link between watching violent behaviors during childhood and becoming a part of these

behaviors as an adult. Experiences unique to the military lifestyle impact the risk for engaging in IPV.

Researchers found being involved with civilian casualties, aggressive training, combat exposure, and alcohol use are correlated with violent behaviors (Forbes & Bryant, 2013). More needs to be understood about other variables possibly influencing these relationships, though (Forbes & Bryant, 2013). Another influence is the individual's attachment style. When creating intervention programs for soldiers who have mental health issues, one recommendation is understanding experiences earlier in life (Sawh et al., 2015). These interventions would be helpful if the individual's attachment style is made more secure, as they might be able to react to stressors in healthier ways. Others found the experiences alone were not enough, as whether the soldier is happy mediated the relationship between number of deployments and IPV in one study (Kelley, Stambaugh, Milletich, Veprinsky, & Snell, 2015). The influence other variables have on the experiences of the soldiers is further evidence IPV is a complex issue. This is further evidence of the need to examine other variables together.

Attachment Style, PTSD, and IPV

While limited, some studies are focused on attachment styles, PTSD, and domestic violence in military samples. A relationship with avoidant attachment style and PTSD was found, while including substance use as a factor (Owens et al., 2013). There are significant relationships with both physical and psychological aggression (Owens et al., 2013). These relationships may have been influenced by measurement tools used (Owens et al., 2013). The potential relationship with substance abuse complicates the

issue. Owens et al. (2013) did note understanding insecure attachments in those with PTSD is beneficial, even when the veteran displayed PTSD symptomatology but not a substance abuse disorder.

Mediating variables, such as emotional intimacy, should be considered when evaluating relationships between PTSD and IPV (Kar & O'Leary, 2013). The emotional attachment could come from a secure attachment style, as this is a way for couples to feel close with one another. Reasons for violence in relationships are both genetic and environmental (Devries, Grundlingh, & Knight, 2016). A person could be predisposed to violent behaviors, and abusive home environments increase the risk for developing mental health issues (Devries et al., 2016). These issues can lead to interpersonal violence (Devries et al., 2016). These complexities are another reason further research should be conducted, approaching IPV from multiple angles. This approach can be used when addressing the influence attachment styles, PTSD, and TBI have on IPV in the military population. Given the lack of research on these topics together, this study is a way to address the research gap.

Summary and Conclusions

Major themes within the limited research on the relationships between attachment styles, PTSD, IPV, and TBI include a need for more research on IPV in the military community, the heterogeneous nature of those involved in IPV, and the need to use attachment theory as the background. Limited heterogeneity existed in the populations used for studies on interventions for male IPV perpetrators, with not enough evidence the programs effectively address IPV behaviors (Cantos & O'Leary, 2014). Understanding

the diverse nature of domestic violence perpetrators would help with creating individualized programs, as this is a more effective way to address IPV. Another issue in these studies is participants not agreeing about IPV occurring, based on the type of violence occurring within the relationship (Tharp, Sherman, Bowling, & Townsend, 2016). The DoD wishes to continue research into mental health concerns specific to soldiers, including research on making the military family more resilient (Hoge et al., 2015). As developing PTSD may be correlated with being a soldier, and have a negative impact on military families when the disorder leads to IPV, both desires for future research are met.

In justifying the need for the presented study, what is known and remains unknown needed to be considered. PTSD symptomatology influences IPV in those who are not secure enough to be independent in their relationships (Kachadourian et al., 2013). Further research is needed on the interaction of these concepts to improve intervention programs (Kachadourian et al., 2013). The suggestion is indication a gap exists in the research on how PTSD and other variables, such as attachment styles, are correlated with IPV. This study was a way to address the gap in the knowledge about IPV as a social problem. More needed to be known about the impact other variables have on PTSD, including ones placing families at higher risk for their soldiers developing the disorder or struggling with interpersonal relationships (Link & Palinkas, 2013). The more practitioners understand about PTSD and IPV, the higher chance there is of preventing these incidents. Preventing IPV can help with creating healthier military families.

One goal, based on the current research, is creating prevention programs addressing the risks of IPV before it happens. The World Health Organization (2016) pointed out 12 countries have plans in place to prevent IPV, with three countries having programs in their schools to prevent these behaviors when young people start dating. Programs based in evidence need to be expanded upon, though (World Health Organization, 2016). Methods to prevent IPV and inform these programs may be expanded upon with further research. The best way to address IPV is by preventing the behavior (Spivak et al., 2014). IPV can be prevented by creating evidence based programs (Spivak et al., 2014). Evidence needed for said programs will be gained through studies such as this one.

The costs associated with prevention would be much less than those spent on dealing with IPV repercussions (Cadilhac et al., 2015). This is further evidence researchers need to understand the variables that are correlated with military families engaging in IPV. Effective programs are thought to promote healthier relationships through adulthood when started from a younger age (Breiding, 2015). Based on these findings, young couples can have healthier relationships throughout their lives if they participate in programs early on.

Another reason to engage in more research on factors correlating with IPV is to create effective intervention programs for heterogeneous populations. IPV interventions currently being used with the military population are not based in enough empirical evidence (Taft et al., 2014). These interventions do not include variables influencing the behavior, such as trauma or PTSD history (Taft et al., 2014). Interventions based in

empirical evidence could be created with further research. This evidence could increase the chance these programs will effectively address IPV in military couples. Intervention programs focused on attachment, especially those meant to increase attachment security, are an effective way to address PTSD symptomatology (Mikulincer & Shaver, 2015; Wiebe & Johnson, 2017). Targeting attachment in relationships is effective when focusing on preventing IPV or intervening with younger couples (Godbout et. al, 2017). Understanding the influence attachment has on PTSD and IPV would be informative to the treatment of these individuals, possibly improving the programs currently in place.

This research will not only strengthen the military family, but could possibly strengthen the soldiers themselves. This may lead to having a stronger fighting force. Researchers noted focusing on understanding the military spouse can be important, as his or her health is considered a necessary element to maintaining the family's health and ability to function (Dolphin, Steinhardt, & Cance, 2015). By including both members of the couple, practitioners could understand how to improve relationship health. The relationship is further explained in the idea the soldier's strength is impacted by the family's strength (Clever & Segal, 2013). Based on these results, along with the gap in the literature, the research has the potential to create positive social change.

Within Chapter 2, an exhaustive literature review addressing what is currently known about IPV in military families, along with how the gap in research is addressed, is provided. The research available on the relationships between the variables is presented to provide a comprehensive background into attachment styles, PTSD, TBI, and IPV. In Chapter 3, the research design chosen to address the research questions is described. The

chosen quantitative research design allowed for consideration of the relationships between attachment styles, PTSD, and IPV. The mediator variable (TBI) effects were considered using quantitative methodology. The methodology used, including considerations made for the military population are presented in Chapter 3.

Chapter 3: Research Method

Introduction

The purpose for the study was understanding the relationships between attachment styles, PTSD symptomatology, and IPV in military couples. Whether TBI mediates any found relationships was determined. In Chapter 3, the research method is presented, beginning with a discussion about the constructs that served as variables. With consideration of ethical issues related to IPV, the cross-sectional quantitative design was the most appropriate framework for understanding the influence attachment styles and PTSD have on IPV. The target population and recruitment methods are presented in this chapter, along with information on the data collected from participants.

In collecting these data, specific instruments were used, whose reliability and validity are addressed within this chapter. The instruments, the AAS, PCL-M, and IJS, are discussed, including the methods used when the instruments were validated. The measurements of each variable (attachment style, PTSD symptoms, TBI, and IPV), including scoring methods, are presented. The ways in which these data were analyzed, including the research questions and statistical tests, are discussed. Given the different research questions, two statistical tests were conducted. These tests were a factorial ANOVA and a linear regression using the mediator function. Any threats to validity were considered, both internal and external, as these could have jeopardized the integrity of the research. Ethical procedures, including the permissions gained, are discussed, as these were an influence on the study. The ways in which the collected data were treated are presented.

Research Design and Rationale

IPV might be influenced by military-specific events, and although interventions are available, they are lacking in empirical evidence (Lewis, Lamson, & White, 2016). The research relating attachment styles, PTSD symptomatology, TBI, and IPV is limited. The purpose for a quantitative, cross-sectional study was understanding the statistical relationship between IPV within military relationships, attachment styles, and PTSD symptomatology. An understanding of whether TBI was an influence on these statistical relationships was sought. Information on IPV, attachment styles, PTSD symptomatology, and TBI was collected from a sample of adults in intimate relationships associated with the military.

The independent variables were attachment styles and PTSD symptomatology, the dependent variable was IPV, and the mediating variable was TBI. The research design was a cross-sectional, quantitative design. A cross-sectional design was connected to the research questions, in that the statistical relationship between the variables was examined over a relatively short time period. Given the design choice, certain time and resource constraints were considered. One resource constraint was time, because the study needed to be completed in a short period. The reasons for the time constraint were the same as in many other studies, as there was neither the money nor the assistance to follow the couples over a long period (Coolican, 2014). The choice was relevant for many reasons, including the fact couples do not remain at one military installation long enough to take part in a longitudinal study.

Considering these constraints, the design was consistent with those needed to advance knowledge in the discipline of psychology. Human behavior, including IPV, cannot be manipulated, which ruled out the experimental research design. The statistical relationships attachment styles and PTSD have with IPV were evaluated. Whether TBI mediates any of these statistical relationships will be better understood. Using standardized survey instruments when collecting these data allowed for the use of quantitative methods to answer the chosen research questions. The quantitative method was a way to advance knowledge in the discipline by providing an understanding of the relationships between attachment styles, PTSD symptoms, TBI, and IPV.

Methodology

Population

The target population was couples in which one member was serving in the military as either active duty or reserve. The couples were mostly affiliated with Fort Bragg and were either married or in a long-term relationship. A sample of adults from the military population was recruited for participation. The target population size was unknown, therefore, a priori calculations were performed.

Sampling and Sampling Procedures

The research took place in the communities surrounding Fort Bragg, North Carolina. The community sample of participants was recruited using the snowball sampling strategy to obtain the desired population size. Snowball sampling is an effective method of obtaining participants for research with vulnerable or hard-to-reach populations (Baltar & Brunet, 2012). The sampling was done by speaking to couples

associated with the military and asking them to refer others to the researcher. Social media were used to recruit participants from the military population to achieve the necessary sample size.

To reach the necessary sample size and achieve generalizable results, certain criteria made up the sampling frame. Exclusion criteria applied to single soldiers, people unaffiliated with the military, and persons from other military branches. Inclusion criteria applied to couples associated with the Army in which both members of the couple agreed to participate. These criteria were necessary to create a sampling frame for military couples.

Another consideration was the elements of power analysis to determine the sample size needed. To reduce the chances of a Type I error falsely rejecting the null hypotheses, the alpha level was set at .05, a standard in the behavioral sciences field (Cohen, 1992). The chance of a Type II error falsely rejecting the alternative hypotheses was reduced by setting the power level at .80 (Cohen, 1992). A priori calculations for a factorial ANOVA were used to determine the necessary sample size. With an unknown population number, given cohabitating couples were not documented, a .05 significance alpha level, a power size of .80, a .25 effect size, and a 95% confidence level, 211 participants were required to obtain statistical significance using the G*power program.

Procedures for Recruitment, Participation, and Data Collection

The recruitment procedures, following approval from the university, began with speaking to couples affiliated with Fort Bragg, the closest military base. The prospective participants were made aware a student in forensic psychology was recruiting participants

for a study on understanding the relationships between attachment styles, PTSD symptomatology, TBI, and IPV. These potential participants were made aware of the possibility for positive social change to come about because of the study. Participation in the study was anonymous. The demographic questionnaire presented to couples during data collection included a request for the participant's age, gender, ethnicity, education, marital status, military status, and income.

When interested couples expressed the desire to participate, whether in person or through another participant, they were given informed consent documents detailing the research. These were either emailed or given to potential participants in person before data collection. Informed consent documents included contact information. Participants were given the opportunity to make contact if they had any questions prior to data collection. These participants were asked to keep the informed consent document for their records. Additional copies of the informed consent document were available when data collection occurred. The returned forms were documentation couples consented to participate.

Couples who agreed to participate in the study were given envelopes containing the documents with random matching numbers. Alphabetical identifiers were randomly assigned to each individual for identification purposes and to protect the participants' anonymity. The random numbers and letters were identifiers for all documents completed by the participants, including informed consent, the three surveys, and the envelopes these data were held in. These data will be stored in a locked secure storage box for a minimum of 5 years.

During the data collection phase, to the extent possible, all participants were treated in the same way. This protected both the validity and reliability of the collected data. The instructions for the surveys were presented in the same way to all participants. After the envelopes including the documents were given to participants, they were debriefed. In cases in which the soldier in a couple was deployed, the soldier could fill out the documents via email. These participants were told to return the documents at their leisure, either in person or via email. Finally, participants were given a timeline for when they should expect the results to be made available, along with information on where these results would be. These participants were then given a chance to ask any questions they had.

During debriefing, participants were fully informed of the research purpose, along with the potential benefits that could come about because of their participation. The participants were made aware of the contact information for the chaplain and the mental health clinic if they felt any distress from participating. The contact information for the researcher was provided, including the projected time frame for when results would be available to the participants. Participants were given the opportunity to ask any questions they had about the research. They were then asked to keep their informed consent document. There were no follow-up procedures required after data collection.

Instrumentation and Operationalization of Constructs

PCL-M. Weathers, Litz, Herman, Huska, and Keane (1993) developed the PTSD checklist in all three forms. The PCL-M was appropriate for use in this study because it was designed for measuring PTSD symptoms described in the *Diagnostic and Statistical*

Manual of Mental Disorders, Fourth Edition (DSM-IV) with military populations. The test-retest reliability is above .70, the convergent validity is above .60, and internal consistency is high (Wilkins, Lang, & Norman, 2011). The PTSD checklists are the most commonly used in research, with the PCL-M worded to be specific to military experiences (Wilkins et al., 2011). The reliability and validity rates were established using Vietnam veterans, including testing validity by comparing symptom reports with those of practitioners (Wilkins et al., 2011). Researchers measured the reliability with veterans who served in Iraq and Afghanistan (Wilkins et al., 2011). These rates, and the population used to measure reliability and validity, made the instrument appropriate for use. The PCL-M is an instrument listed as in the public domain. Its public-domain status was verified with the developer, therefore, permission for its use did not need to be sought.

AAS. Collins and Read (1990) developed the AAS to measure attachment styles. The AAS measures secure, anxious, and avoidant attachment styles for adults. The instrument was appropriate because the scales measure the chosen constructs of attachment (Ravitz, Maunder, Hunter, Sthankiya, & Lancee, 2010). The subscales are related to various aspects of personality and relationships (Ravitz et al., 2010). The Cronbach's alpha of reliability for the three styles measured with the AAS are around .70, as are the test-retest reliability scores (Collins & Read, 1990). The reliability was established using a sample of college students and having some participants repeat filling out the AAS a few months later (Collins & Read, 1990). As for validity, patients from a mental health clinic were used as the sample when the rates were established (Wu,

Zhang, & Liu, 2004). Both discriminatory and construct validity are high (Wu et al., 2004). Using the AAS with more than one population was justification for measuring attachment styles with the instrument. The AAS did not require permission for research use.

IJS. Jory (2004) developed the IJS as an instrument designed to measure the dynamics related to violence in intimate relationships. The IJS measures the risk of violent behaviors, with low scores being indicative no incidents were reported and high scores being indicative of a good likelihood violence was occurring. The IJS was the appropriate choice, as participants were able to provide information on the dynamics of their relationships. The internal consistency reliability is .98, and the instrument showed discriminant validity, but further studies are needed to verify validity scores (Jory, 2004). The IJS is recommended for research use and for measuring violence levels for therapeutic reasons (Jory, 2004). The reliability and validity rates were established with the help of therapists who worked with the participants (Jory, 2004). The therapists compared the reports to those of other scales administered to these patients (Jory, 2004). Although these rates were established with civilians in therapy, the brief nature and high scores were reasons to use the instrument. Permission was sought from the author to use the instrument because the IJS is copyrighted. The permission documentation is attached in Appendix A.

Operationalization

Each variable measured with these instruments needed operational definitions. The variables measured were attachment styles, PTSD symptoms, and IPV. The

operational definition for attachment styles was how one relates to others based on whether one developed a positive attachment with caregivers or not (Wilhelm, Gillis, & Parker, 2016). Attachment was further defined by the three specific attachment styles measured, the anxious, avoidant, and secure attachment styles. The operational definition for PTSD was symptoms of the disorder from the DSM-IV. IPV was defined as any violent act or aggression committed by someone in an intimate relationship with the victim (Centers for Disease Control and Prevention, 2016b).

Each variable was measured using the instruments discussed. These variables were each scored, with these scores representing the answers to the research questions. Attachment styles were measured using a Likert-scale on the AAS. The scores were used to determine if the participant had a secure, avoidant, or anxious attachment style. These numbers correlated with a scale from *not characteristic* (1) to *characteristic* (5). An example from the measurement instrument is the statement "I find it difficult to allow myself to depend on others" (Collins & Read, 1990), which is related to measuring the avoidant attachment style (Collins & Read, 1990).

The second independent variable, PTSD, was measured with the PCL-M, another Likert-scale instrument. The different PTSD symptoms were measured on a scale of 1 to 5, where the numbers correlated with *not experiencing the symptom at all* to *extremely*. These scores were then added up to determine the level of PTSD symptoms the individual was experiencing. The specific symptoms the participant had experienced were measured. For example, one question addressed whether the participants had

experienced repeated, disturbing memories, thoughts, or images of a stressful military experience from the past within the past month (Weathers et al., 2011).

The dependent variable, IPV, was measured using the IJS, another Likert-scale. Scoring 15 or less was indicative *no violence risk* was present, scores of 30-45 were correlated with minor incidents, scores over 45 were related to medium risk, and the cutoff for extreme violence levels was 75. These risk levels were determined by the scores for 15 questions, where a 1 indicated the participant did *not agree* with the statement and a 5 indicated *strong agreement* with the statement. For example, one statement read, "My partner never admits when he or she is wrong" (Jory, 2004). The agreement levels correlated with whether IPV might be occurring within the relationship.

Data Analysis Plan

The software used for the analyses was the IBM SPSS Statistics program. SPSS is a statistical analysis package for the social sciences. The IBM software was used to answer the research questions and address the hypotheses. Data cleaning and screening began with inspecting all collected data sets to determine if there were any errors, or if data were missing. Corrections were made to these data when necessary. Cases were deleted when necessary to protect the integrity of the research. These corrections or deletions were necessary to address missing or unclear data. The following research questions and hypotheses were considered in relation to the collected data:

Research Question 1: What is the relationship between attachment styles, PTSD, and IPV in military couples?

$H_0$1: There is no relationship between secure attachment style, PTSD, and IPV in military couples.

H_a1: There is a significant relationship between secure attachment style, PTSD, and IPV in military couples.

$H_0$2: There is no relationship between anxious attachment style, PTSD, and IPV in military couples.

H_a2: There is a significant relationship between anxious attachment, PTSD, and IPV in military couples.

$H_0$3: There is no relationship between avoidant attachment style, PTSD, and IPV in military couples.

H_a3: There is a significant relationship between avoidant attachment style, PTSD, and IPV in military couples.

Research Question 2: What role does TBI play in the relationship between attachment style, PTSD, and IPV in military couples?

$H_0$4: TBI does not mediate the relationship between secure attachment style, PTSD, and IPV in military couples.

H_a4: TBI mediates the relationship between secure attachment style, PTSD, and IPV in military couples.

$H_0$5: TBI does not mediate the relationship between anxious attachment style, PTSD, and IPV in military couples.

H_a5: TBI mediates the relationship between anxious attachment style, PTSD, and IPV in military couples.

$H_0$6: TBI does not mediate the relationship between avoidant attachment style, PTSD, and IPV in military couples

H_a6: TBI mediates the relationship between avoidant attachment style, PTSD, and IPV in military couples.

The data from the first research question were analyzed using a factorial ANOVA. A linear regression with the mediator function was performed for the second research question. The factorial ANOVA is an appropriate data analysis method when there is more than one independent variable (Field, 2013a). Using a factorial ANOVA allowed for the independent variables (attachment style, PTSD) to be understood in relation to IPV, the dependent variable. The regression analysis using the mediator function was used to determine if TBI mediates any relationships found between attachment styles, PTSD, and IPV.

The results were interpreted through main and interaction effects of the variables, indicated by their *F* ratios (Field, 2013a). Bonferroni post hoc tests were used to determine the main effects of the independent variables (Field, 2013a). These tests were a means of further understanding the relationships between these variables (Field, 2013a). A simple effects analysis, the statistical significance of the model and each IV, and measurement of the mean differences were calculated. The indirect effects were examined for the second research question to see if bootstrap confidence intervals included zero or not, because not including zero is indicative the effect is statistically significant (Field, 2013b).

Threats to Validity

Given the research design and methodology, threats to validity were considered and acknowledged before data collection occurred. Issues with the operational IPV definition, the DV, could have posed threats to the external and internal validity of the results. Another external validity threat was sampling bias. Sampling bias could occur if the participants were too homogenous, an indication the sample did not properly represent the military population. Given the sample was Army couples, there was a chance the results will not generalize to other branches.

Based on the research questions, there was a chance individuals involved in IPV would not participate, a threat based on the variables' specificity. To address generalizability as a threat, the heterogeneous nature of the Army was considered. Confidentiality and anonymity was stressed to any potential participants. Finally, a threat to consider, given the overlap attachment issues have with PTSD, was the correlation between these variables. The threat was addressed statistically, and by including participants who did not report PTSD symptoms.

Internal validity threats included biases, such as self-report and social desirability bias. These biases were a risk, given the sensitive nature of IPV and previous researchers experiencing these issues. To address these threats, the data collected were confidential and private. These methods were a way to improve the chance participants would make disclosures about IPV within their relationships. Mortality was another threat to internal validity for cross-sectional designs. This threat was addressed by performing the surveys in one sitting, because this prevented participants from dropping out during data

collection. Instrumentation threatened internal validity, but was controlled by using one researcher to present surveys, and doing so in an identical manner for all participants. Selection was another threat, because the history of different couples may have impacted the results. No two couples are alike, meaning factors such as age or experiences could have produced undue influence on the results. Selection threat was addressed by acknowledging the heterogeneity of the population, and including demographics in the analysis.

Statistical conclusion validity threats included improper statistical procedures or settings. By setting the power at .80, conclusion validity was improved. Statistical validity was addressed using the appropriate procedures to answer the research questions, while considering the possibilities of Type I and Type II errors (García-Pérez, 2012). Construct validity threats were low, given the validity and reliability rates of the survey instruments used to collect the data. Addressing these threats ensured the results were valid, making them generalizable.

Ethical Procedures

Before conducting the research, ethical procedures were drafted to protect the participants and the study's integrity. The Institutional Review Board provided permission for data collection based on the information included, with the approval number 12-22-16-0233506. Military community samples were recruited, following approval from the university. The researcher's contact information was provided to potential participants, along with informed consent documents. This was done so those

who wished to participate could contact the researcher with any questions before, during, or after participation.

Participants had the option to select "I agree" on the informed consent document, acknowledging their understanding and agreement to participate. Participants were not required to sign informed consent documents, to ensure confidentiality/anonymity. Placing a mark by the "I agree" item at the end of the informed consent document, and supplying their random identification number with the associated random letter demonstrated the participant understood his or her rights. Marking the informed consent documents appropriately served as implied consent. Participants were informed they could withdraw from participating at any time without being penalized. The participants were provided with contact information for the chaplain and the mental health clinic on Fort Bragg, in the event they experienced emotional distress.

Participants were informed there were risks and benefits associated with participation. A potential risk associated with participation was emotional distress caused by collecting information on IPV. To protect the participants' welfare, they were debriefed following participation. During debriefing, participants were given contact information for the chaplain and mental health clinic for if they felt distress. This was done to ensure any risks could addressed by licensed providers. Contact information was provided for the researcher, in case the participant had any questions. To conclude debriefing, participants were told the projected timeframe for when the results would be made available, given the opportunity to ask questions, and asked to keep the original informed consent document.

Potential benefits related to serving as a participant included valuable contributions to research on military couples impacted by IPV. By providing information on attachment styles, PTSD, and TBI, participants were contributing to understanding the impact these variables have on IPV within the military population. The contribution from these findings might be a positive influence on intervention and prevention programs for IPV. Findings from the study will increase the knowledge base about the social issue, while providing avenues for future research. The information could increase the importance of understanding the various influences on IPV in military samples. The ways attachment style can be used to enhance relationships is better understood.

Understanding ways attachment style may be used to improve relationships came from the results, based on the statistical significance of each analysis. The sample size needed to obtain statistical significance was 211 participants. The data collected from these participants were anonymous and confidential, given the randomly assigned numbers with random letters. Anonymity addressed any concerns participants had about any possible IPV disclosures.

On days when data collection occurred, individuals who agreed to participate were given packets with randomly assigned identification numbers and letters. The members of each couple shared the same number with different random letters to ensure the interaction of the couples' information was not lost during data collection. The identifiers on all survey documents were used to protect the participants' anonymity and the data's integrity. As data were collected, the surveys were stored in a locked storage box. No one other than the researcher and university faculty have access to the data.

Finally, as required by the university, the information collected from the survey instruments is and will be stored securely in the locked storage box for a minimum of 5 years, at which time they will be destroyed.

Summary

In Chapter 3, the quantitative research design was discussed as the method used to understand the relationships between attachment styles, PTSD, and IPV. The potential effects the mediator variable, TBI, had on these relationships were considered. The methodology was described in detail, including the reasoning for choosing the cross-sectional, quantitative method. Data collection methods, a key element to understanding the relationships between the variables, were elaborated on. Ethical considerations for the study were presented, necessary for any study, but more urgent when the research is conducted with vulnerable populations. Addressing these decisions allowed for understanding how the study was conducted, as this will facilitate replication if necessary.

Included in Chapter 4 is a discussion regarding the data collected, along with any changes that occurred during the data collection phase. These changes were made based on the need to collect data in a timely manner, while following guidelines the review board established. Baseline descriptives are reported to describe the representation of the sample compared to the military population. Details about the results from the analyses conducted to understand the relationships between attachment styles, PTSD, and IPV are provided. Whether TBI mediates statistically significant relationships is considered. These details include the demographics of the sample used for the study relating to the

major variables, statistical assumptions addressed, and other relevant statistical information.

Chapter 4: Results

Introduction

This quantitative study was designed with the intent of advancing research related to IPV in military couples. To address gaps in existing research, the purpose for this cross-sectional study was collecting data on the influence attachment styles and PTSD have on IPV. The investigation was extended to whether TBI mediates any of these relationships. Attachment styles and PTSD symptoms were measured. These scores were compared with the IPV risk scores measured. Relationships between attachment styles and PTSD, attachment styles and IPV risk, and PTSD and IPV risk were measured. TBI diagnoses were compared to the relationships previously described. This allowed for an investigation into whether brain injury mediated any measured relationships.

The first research question was about the relationship between attachment styles, PTSD, and IPV in military couples. In evaluating the research question, the null hypotheses would be accepted if no relationships existed between attachment styles, PTSD, and IPV in military couples. If statistically significant relationships were found between attachment styles, PTSD, and IPV in military couples, the null hypotheses would be rejected. The research question and hypotheses were addressed using the factorial ANOVA. The results are an addition to the literature and include details on the influence different attachment styles within a relationship have on IPV risk.

The second research question addressed mediation by TBI in any statistically significant relationships found in the first research question. Not adequately addressed in the current research was the impact TBI had on these relationships, which was why this

mediating variable was included. The question was designed to understand the role TBI plays in relationships between attachment styles, PTSD, and IPV in military couples. The null hypotheses would be accepted if TBI did not mediate the relationship between attachment styles, PTSD, and IPV in military couples. The null hypotheses would be rejected if TBI mediated the relationships between attachment styles, PTSD, and IPV in military couples. The question and hypotheses were evaluated using a linear regression analysis, with the mediator function.

In this chapter, the purpose for the quantitative study is described in the context of the research questions. How data were collected, along with any alterations to the plans for the study, are discussed. Descriptive statistics are provided as context for whether the participants represented the military population. The trait distributions are discussed before any examination regarding their relationships with violence risk is made.

Included within the results section are the descriptive statistics from each test regarding all major study variables. The statistical assumptions for a factorial ANOVA and linear regression are tested. Their appropriateness or need to be addressed is reported. Using the research questions and hypotheses, the results from the factorial ANOVA and mediation analyses are presented. Any additional statistical tests conducted, such as post hoc tests, are reported and discussed.

Data Collection

These data were collected over a period lasting 3 months, using snowball sampling. The response rate was 34.3%, as 760 potential participants were provided with the survey information and 261 returned the surveys. There were 228 returned surveys

that could be used, these were full sets where both members of the couple returned a completed survey. Other surveys could not be used because potential participants only completed the informed consent page. As snowball sampling was used, the number of people told, through word of mouth or online, about the study by those who participated is unknown, which meant the recruitment rate cannot be described accurately. The participants were actively recruited from Fort Bragg, Fort Richardson, Fort Bliss, and Fort Hood. This was done by posting the invitation (Appendix B) to military wives' pages on Facebook and by transmitting information about the study by word of mouth to known military couples. The targeted bases were all with the Army, which allowed for representation of such a heterogeneous institution.

These data were collected according to IRB approval guidelines. Snowball sampling was performed because this method is way to reach a target population within a reasonable period. Data were collected without using military resources or requiring permissions from a military IRB. During data collection, a need to make the surveys available online arose. Based on this need, the IRB was contacted with the request to change the data collection plan. The change was made based on a slow start to data collection and requests for an online format from potential participants. The surveys were placed on Survey Monkey (Appendices C, D, E, F, and G) following approval from the IRB. Potential participants were then given the survey link (https://www.surveymonkey.com/r/KNDS5VJ), rather than paper surveys.

There were 261 total participants, with 33 returned surveys that could not be used. No missing values existed within the dataset. The attachment styles distribution for the

population is presented. There were 38 anxiously attached participants, 61 avoidantly attached participants, and 129 securely attached participants (see Figure 1). The frequencies are of interest, given the documented relationships between insecure attachments and choosing the military lifestyle (Katon et al., 2015). It was expected there would more be participants reporting anxious or avoidant attachment styles. Of the 114 couples whose surveys were used, 58 had partners who scored differently from one another on their attachment scales, and 56 couples had partners who scored the same as one another. The pairings allowed for representation of the ways in which different attachment styles interacted within relationships.

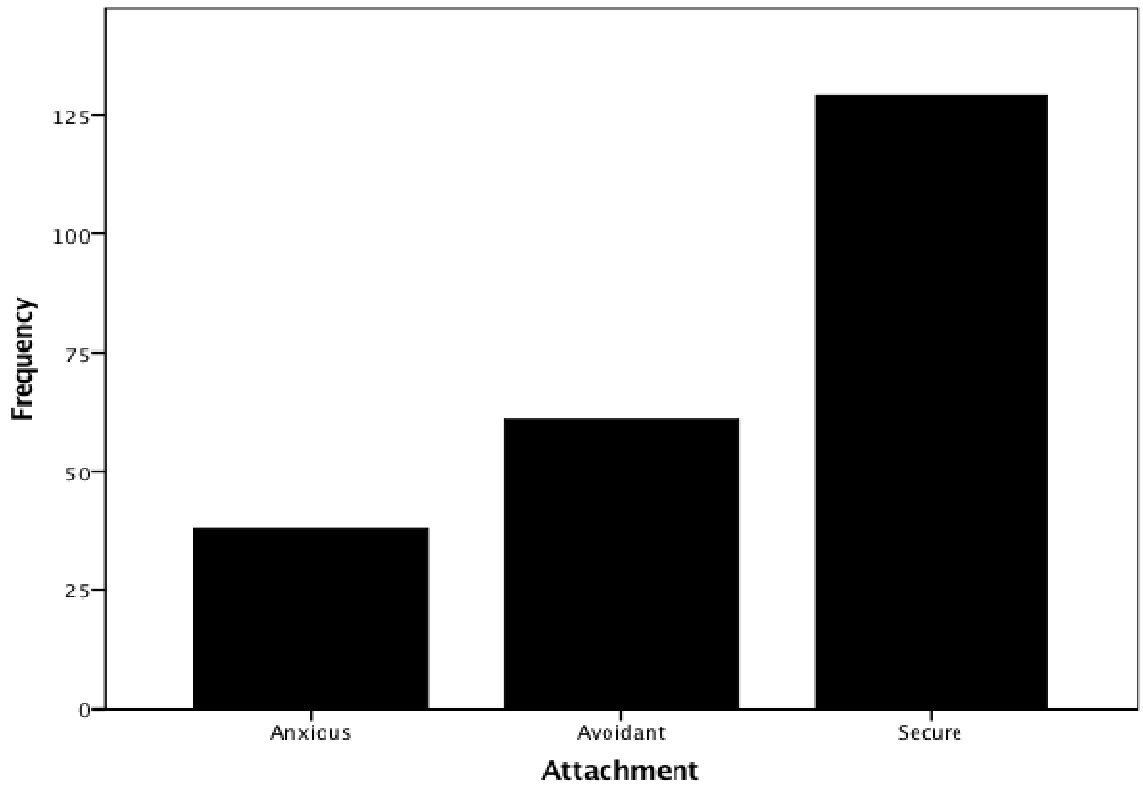

Figure 1. Attachment styles frequencies.

There were 103 married couples and 11 cohabitating couples. Of these participants, 138 were active duty, four were reserve, and 86 were civilian partners. Participants were asked whether they had been diagnosed with a TBI. There were 45 participants who reported having received a TBI diagnosis. All participants volunteered additional characteristics, including education, specific age ranges, relationship details, information about military service, and other personal characteristics (see Tables 1, 2, and 3).

Table 1

Personal Characteristics

Characteristic	Sample percentage
TBI	
Yes	19.7
No	80.3
Ethnicity	
Black	7.0
White	82.5
Other	10.5
Age	
18-29	45.0
30-41	45.6
42-65	9.1
Education	
High school diploma	13.2
Some college	36.4
College degree	50.4
Income	
Less than $25,000	4.4
$25,001- $50,000	36.4
$50,001- $75,000	32.5
Over $75,001	26.3

Table 2

Couple Characteristics

Characteristic	Sample percentage
Marital status	
Married	90.4
Cohabitating	9.6
Relationship length	
1-5 years	40.3
6-10 years	29.3
Over 10 years	30.4
Children	
None	27.2
1	23.7
2	21.9
3 or more	27.2

Table 3

Military Characteristics

Characteristic	Sample percentage
Military relation	
Active duty	60.5
Reserve	1.8
Civilian partner or spouse	37.7
Time in service	
1-10 years	59.2
11-20 years	35.5
20 or more years	5.3
Combat deployments	
0	23.7
1 or 2	41.3
3 or more	35.1
Rank	
E-1 to E-4	17.5
E-5 to E-6	40.4
E-7 to E-9	27.6
O-1 to O-3	10.1
O-4 and above	4.4

Given the characteristics provided in the tables above, the sample was close to representative of the population being studied. The percentages of participants representing the reserve (1.8%) and those who were cohabitating (9.6%) were lower than expected. The underrepresentation of reserve soldiers and cohabitating couples may have limited the sample's ability to represent all military couples. As cohabitating couples are not documented, there is no way to verify the representation levels needed. For ideal representation levels to be determined, a researcher would need to know how many soldiers are living with significant others throughout the military. Based on the demographics, the results best represent older active duty couples in which the soldier is a junior or senior noncommissioned officer.

Results

Descriptive Statistics

There were 261 participants who returned the survey packets. Of those who responded, 83.5% were eligible for data analysis, given the 33 excluded cases. Cases were excluded based on missing surveys from the significant other. Because the study was designed to focus on couples and inclusion criteria indicated a need for both members to participate, these surveys were not included in the statistical analysis.

Statistical Assumptions

Factorial ANOVA. The factorial ANOVA was conducted to examine the effects attachment styles and PTSD have on one another, including the effects these IVs have on the DV, IPV. To conduct a factorial ANOVA, certain assumptions need to be met or addressed. The statistical assumptions to conduct a factorial ANOVA are those of

homogeneity, normality, and independence. To test the homogeneity assumption, Levene's test was conducted, with an F ratio of $F(11, 216) = 2.35$, $p = .009$. The significant Levene's test is a violation of the assumption. The results were indicative of unequal variances. Given the unequal group sizes, the significant results were expected. The results were interpreted with caution because ANOVAs are robust to the assumption (Field, 2013a). The normality assumption was found to be met through visual inspection. The independence assumption was met, as the groups within each independent variable were independent from one another. Based on meeting or addressing these assumptions, the factorial ANOVA was conducted to determine the relationships between the IVs and DV.

Linear regression with mediation. The linear regression with the mediator function was conducted to examine the effect TBI had on the relationships between the IVs and the DV. Certain statistical assumptions related to conducting a linear regression need to be met or addressed. The statistical assumptions to conduct a mediation analysis are those of normality, linearity, multicollinearity, autocorrelation, and homoscedasticity. The normality assumption was met based on the visual inspection of the data. The linearity assumption was tested through visual inspection and found to be met. The multicollinearity assumption was tested with a correlation matrix. All correlation coefficients were smaller than 1, which met the assumption. The autocorrelation assumption was met based on the result of the Durbin-Watson test, which was 1.71. Scores around 2 are indicative autocorrelation did not occur (Field, 2013b). The homoscedasticity assumption was tested through visual inspection of the standardized

residuals plot. The assumption was met, because the data were shown to have relative even distribution. Based on meeting these assumptions, the linear regression with mediation was conducted to understand how TBI influenced any relationships found between the IVs and the DV.

Statistical Analyses

The dependent variable, IPV, was measured as violence risk because the measurement tool used was designed for measuring risk. Lower scores were indicative the couple posed less risk, whereas higher scores were indicative a greater risk of violence was present. The risk for bias did exist, even with the use of valid and reliable instruments, given the stigma surrounding IPV is great in the military community. Despite the risk, the results are indicative there are relationships between the IVs and DV.

A factorial ANOVA was conducted to establish whether violence risk in a relationship was influenced by attachment styles, PTSD, or both. Post hoc testing was performed because each independent variable contained more than three groups. Levene's test of equality of error variances was performed to determine if there were significant differences within the variances (Field, 2013a). The *F* statistic was interpreted for the variance within the samples. The factorial ANOVA was chosen based on the research questions, the hypotheses, the data presented, and the ability to statistically analyze the specific variables.

A linear regression analysis using the mediator function was conducted to establish whether the relationships found in the factorial ANOVA could be explained through the MV, TBI. Secondary statistical analysis was performed using the variables

that had statistically significant relationships with one another. The relationships with nonsignificant results in the factorial ANOVA were not included in the mediation analysis. The Sobel test and confidence intervals were used to determine the impact the MV had on the relationships between the IVs and the DV.

Factorial ANOVA. A factorial ANOVA was conducted to compare the main effects of attachment styles and PTSD, and the interaction effects of attachment styles and PTSD on IPV. The factorial ANOVA was conducted to understand the relationships between attachment styles, PTSD, and IPV in military couples. The analysis was conducted on the influence two independent variables (attachment style, PTSD symptoms) have on IPV risk. Attachment style included three levels (secure, anxious, avoidant) whereas PTSD symptoms had four levels (none, low, moderate, high). The effects were significant at the .05 significance level for two models (see Table 4).

Table 4

Attachment, Posttraumatic Stress Disorder, and Interaction Results

Variables	*F*	*df1*	*df2*	Sig.
Attachment	12.06	2	216	.000
Posttraumatic stress disorder	2.21	3	216	.088
Attachment and posttraumatic stress disorder	2.90	6	216	.010

The main effect for attachment style yielded an F ratio of $F(2, 216) = 12.06$, $p < .001$, $\eta^2 = .100$. The results were indicative there was a significant difference between secure attachment ($M = 27.65$, $SD = 12.55$), anxious attachment ($M = 41.34$, $SD = 13.44$), and avoidant attachment ($M = 30.57$, $SD = 11.77$). The main effect for PTSD symptomatology yielded an F ratio of $F(3, 216) = 2.21$, $p = .088$, $\eta^2 = .030$. The results

were suggestive the PTSD effect was nonsignificant, none (M= 27.14, SD =12.98), low (M = 29.13, SD = 11.36), moderate (M = 34.11, SD = 15.25), and high (M = 36.76, SD = 14.07). The interaction effect between attachment styles, PTSD, and IPV was significant, $F(6, 216) = 2.90$, $p = .010$, $\eta^2 = .075$. Based on the statistically significant interaction effect, the null hypotheses regarding the relationships between attachment styles, PTSD, and IPV were examined. Post hoc analysis was conducted to further understand the significant relationships within the different independent variable levels.

The significant interaction effect between attachment styles, PTSD, and IPV is further understood by evaluating the differences in means. The ANOVA was performed for each IV and the DV, and with both IVs and the DV to determine the different relationships. The mean differences for all groups were statistically significant, based on confidence interval levels. The anxious group has higher mean scores than the avoidant group, based on the calculated mean risk level for each group. The means for the anxious and avoidant groups are higher than the mean for the secure group. Of the PTSD groups, the mean totals are higher as the symptom level increased. Further evidence regarding these interactions is seen in the profile plot (see Figure 2). Additional statistical testing was conducted based on the results of the analysis from the first research question.

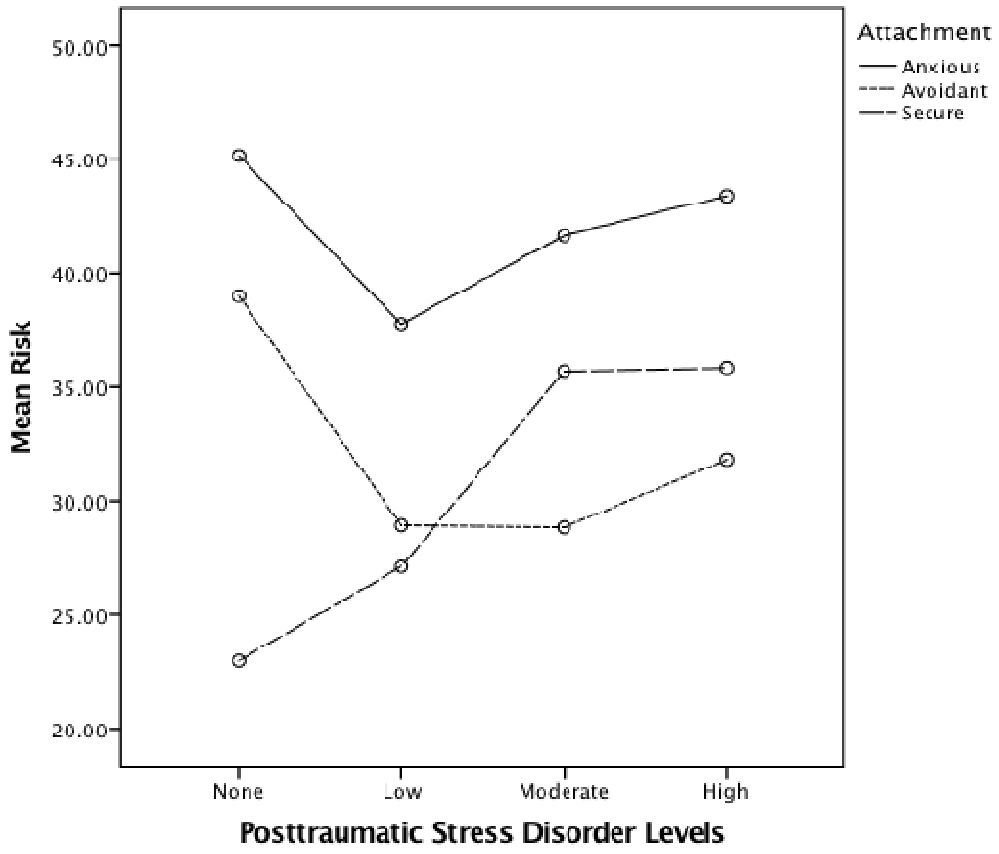

Figure 2. Posttraumatic stress disorder levels, attachment, and violence risk.

A post hoc analysis was conducted to understand the statistical significance of the independent variable levels. This allowed for understanding how specific attachment styles were an influence on IPV risk. Simple main effects analysis was indicative IPV risk was significantly higher in couples where one partner was anxiously attached and the other avoidant ($p = .001$) or where one partner was anxiously attached and the other secure ($p < .001$). There were no significant differences found in couples with a secure and avoidant attachment pairing ($p = .804$). These results are an explanation for the

statistically significant model and the ways attachment styles interact with one another in relation to IPV risk.

A post hoc analysis was conducted to understand the statistical nonsignificance of the PTSD model to determine if all PTSD levels within couples were nonsignificant. Tukey HSD analysis was performed on all possible pairwise comparisons. Couples where one partner experienced no symptoms and the other moderate symptoms (p = .024), no symptoms partnered with someone experiencing high symptom levels (p = .002), and low symptoms partnered with someone experiencing high symptoms levels (p = .011) were significantly different based on Bonferroni post hoc tests. Partners where one person experienced no symptoms and the other low symptom levels (p = 1.000), low symptoms with someone who is experiencing moderate symptoms (p = .150), and one person experiencing moderate symptom levels partnered with someone who experienced high symptom levels (p = .769) were nonsignificant. Based on the statistical significance levels, specific PTSD symptom level pairings within couples were predictors of engaging in IPV (see Table 5).

Table 5

Posttraumatic Stress Disorder Pairwise Comparisons

Symptom level	Moderate	High
None	.024*	.002*
Low	.150	.011*

Linear regression with mediation. Regression analysis was used to investigate whether TBI mediates the relationships between attachment styles, PTSD, and IPV. This was done as means of answering what role TBI plays in the relationship between

attachment styles, PTSD, and IPV in military couples. Mediation analysis was conducted on the influence TBI levels (no diagnosis, military diagnosis, civilian diagnosis) have on the relationship between attachment styles (secure, anxious, avoidant), PTSD symptom levels (none, low, moderate, high), and IPV risk. Attachment styles were nonsignificant TBI predictors, $b = .035$, $SE = .047$, $p = .454$, but PTSD was a significant predictor, $b = .097$, $SE = .036$, $p < .05$ (see Table 4). Including attachment and PTSD, TBI was a nonsignificant IPV predictor, $b = -1.15$, $SE = 1.61$, $p = .475$ (see Table 4). The null mediational hypotheses failed to be rejected. Attachment styles and PTSD were not significant IPV predictors after controlling for the mediator.

The indirect effect was tested using a bootstrap estimation approach with 1000 samples. A bootstrap estimation approach was used as means of creating the confidence intervals for the indirect effects of the variables (Field, 2013b). Confidence intervals are a way to ensure the results are valid, as not crossing zero is verification of an indirect effect from the mediator variable (Field, 2013b). The indirect coefficient was nonsignificant, $b = -.040$, $SE = 1.31$, 95% CI [-.3955, .0064]. TBI diagnosis was not associated with the IVs and DV based on these results, as the 95% CI crossed zero.

Another regression analysis was used to investigate the hypotheses regarding TBI mediating the relationship between attachment styles and IPV. Mediation analysis was conducted on the influence TBI levels (no diagnosis, military diagnosis, civilian diagnosis) have on the relationship between attachment styles (secure, anxious, avoidant) and the IPV risk. Attachment was a nonsignificant predictor of TBI diagnosis, $b = .000$, $SE = .046$, $p = .994$, and TBI diagnosis was a nonsignificant IPV predictor, $b = -.367$, SE

= 1.60, p = .824 (see Table 5). The null mediational hypotheses failed to be rejected. Attachment styles were nonsignificant IPV predictors after controlling for the mediator.

The indirect effect was tested using a bootstrap estimation approach with 1000 samples. This method was a way to increase the robustness of the results by repeating the sampling from the original data set (Yuan & MacKinnon, 2014), as not every person from the population could be included. The mediation effect was then tested for each of these replicated samples (Yuan & MacKinnon, 2014). The indirect coefficient was nonsignificant, b = -.0001, SE = .082, 95% CI [-.1527, .1659]. A TBI diagnosis was not associated with the IV and DV based on these results, as the 95% CI crossed zero.

Additional statistical tests. Additional statistical analyses were conducted to further understand the impact different PTSD symptoms have on IPV risk. Linear regression analyses were conducted to determine the relationships between specific PTSD symptoms and IPV risk. These analyses were done with each symptom measured using the PCL-M, with comparisons made to the reported IPV risk levels. Statistical assumptions were previously tested for a linear regression. The assumptions being met were indication this statistical choice was appropriate. The null hypotheses for these analyses was there would be no relationship between increased symptom levels and IPV risk. Many symptoms were found to have statistically significant relationships with IPV risk (see Table 6).

Table 6

Posttraumatic Stress Symptoms and Violence Risk

Symptoms	*df1*	*df2*	*F*	Sig.	R^2
Repeated thoughts	1	226	12.68	.000	.053
Upset	1	226	9.51	.002	.040
Avoiding thoughts	1	226	6.00	.015	.026
Avoiding activities	1	226	8.27	.004	.035
Memory	1	226	10.77	.001	.045
Interest	1	226	16.91	.000	.070
Cut off	1	226	15.82	.000	.065
Emotionally numb	1	226	13.88	.000	.058
Future cut short	1	226	15.58	.000	.065
Sleep difficulties	1	226	5.61	.000	.024
Anger	1	226	10.69	.001	.045
Concentration issues	1	226	14.99	.000	.062
Alert	1	226	6.56	.011	.028
Jumpy	1	226	5.85	.016	.025

Linear regression analyses were used to investigate the hypotheses regarding PTSD symptom levels and IPV risk. The first symptom investigated was repeated memories, thoughts, or images related to a military experience. A linear regression was calculated to predict IPV when the person experienced repeated memories, thoughts, or images related to a military experience. A significant regression equation was found, $F(1,226) = 12.68$, $p < .001$, $R^2 = .053$ (see Table 6). Participants' predicted IPV risk is equal to .172 + .018 (repeated memories, thoughts, or images related to a military experience + IPV risk) when the IV variable is measured with the PCL-M. IPV risk increased .018 times for each agreement level for repeated memories, thoughts, or images related to a military experience

The symptom where the participant experienced repeated, disturbing dreams of a stressful military experience was compared to IPV risk scores. A linear regression was calculated to predict IPV when the person experienced repeated, disturbing dreams of a stressful military experience. A nonsignificant regression equation was found, $F(1, 226) = 3.62$, $p = .058$, $R^2 = .016$. Participants' predicted IPV risk is equal to 29.78 + 1.77 (repeated, disturbing dreams of a stressful military experience + IPV risk) when the independent variable is measured with the PCL-M.

The symptom where the participant was suddenly acting or feeling as if a stressful military experience were happening again (as if you were reliving it) was compared to IPV risk scores. A linear regression was calculated to predict IPV when the person relived their military experience. A nonsignificant regression equation was found, $F(1, 226) = 3.30$, $p = .071$, $R^2 = .014$. Participants' predicted IPV risk is equal to 30.04 + 1.80 (suddenly acting or feeling as if a stressful military experience were happening again as if you were reliving it + IPV risk) when the independent variable is measured with the PCL-M.

Experiencing the symptom of feeling very upset when something reminded the participant of a stressful military experience was compared to IPV scores. A linear regression was calculated to predict IPV when the person felt upset because he or she remembered something traumatic related to military service. A significant regression equation was found, $F(1,226) = 9.51$, $p < .05$, $R^2 = .040$ (see Table 6). Participants' predicted IPV risk is equal to 29.05 + 2.52 (feeling very upset when something reminded you of a stressful military experience + IPV risk) when the independent variable is

measured with the PCL-M. IPV risk increased 2.52 times for each agreement level for feeling very upset when something reminded you of a stressful military experience.

Participants having physical reactions (e.g., heart pounding, trouble breathing, or sweating) when something reminded you of a stressful military experience was compared to IPV risk scores. A linear regression was calculated to predict IPV when the person had a physical reaction when reminded of a stressful military experience. A nonsignificant regression equation was found, $F(1, 226) = 3.49$, $p = .063$, $R^2 = .015$. Participants' predicted IPV risk is equal to 29.78 + 1.56 (physical reactions (e.g., heart pounding, trouble breathing, or sweating) when something reminded you of a stressful military experience + IPV risk) when the independent variable is measured with the PCL-M.

The symptom where participants avoid thinking about or talking about a stressful military experience or avoid having feelings related to it was compared to IPV. A linear regression was calculated to predict IPV when the person avoided thinking or talking about a stressful experience. A significant regression equation was found, $F(1,226) = 6.00$, $p < .05$, $R^2 = .026$ (see Table 6). Participants' predicted IPV risk is equal to 29.38 + 1.86 (avoid thinking about or talking about a stressful military experience or avoid having feelings related to it + IPV risk) when the independent variable is measured with the PCL-M. IPV risk increased 1.86 times for each agreement level about avoiding thinking about or talking about a stressful military experience or avoid having feelings related to it.

Some participants reported avoiding activities or talking about a stressful military experience or avoiding having feelings related to it, which was compared to IPV risk scores. A linear regression was calculated to predict IPV when the person was avoiding activities or talking about a stressful military experience or avoiding having feelings related to it. A significant regression equation was found, $F(1,226) = 8.27$, $p < .05$, $R^2 = .035$ (see Table 6). Participants' predicted IPV risk is equal to 29.52 + 2.36 (avoiding activities or talking about a stressful military experience or avoiding having feelings related to it + IPV risk) when the independent variable is measured with the PCL-M. IPV risk increased 2.36 times for each agreement level about reported avoiding activities or talking about a stressful military experience or avoiding having feelings related to it.

Participants reported having trouble remembering important parts of a stressful military experience, a symptom which was compared to IPV risk. A linear regression was calculated to predict IPV when the person had trouble remembering important parts of a stressful military experience. A significant regression equation was found, $F(1,226) = 10.77$, $p < .05$, $R^2 = .045$ (see Table 6). Participants' predicted IPV risk is equal to 29.47 + 2.98 (trouble remembering important parts of a stressful military experience + IPV risk) when the independent variable is measured with the PCL-M. IPV risk increased 2.98 times for each agreement level about having trouble remembering important parts of a stressful military experience.

Participants reported having a loss of interest in things they used to enjoy, and the scores were compared to IPV risk scores. A linear regression was calculated to predict IPV when the person was reporting having a loss of interest in things you used to enjoy.

A significant regression equation was found, $F(1,226) = 16.91$, $p < .001$, $R^2 = .07$ (see Table 6). Participants' predicted IPV risk is equal to 28.37 + 3.10 (loss of interest in things you used to enjoy + IPV risk) when the independent variable is measured with the PCL-M. IPV risk increased 3.10 times for each agreement level about having a loss of interest in things you used to enjoy.

Participants reported feeling distant or cut off from other people, which scores were compared to IPV risk. A linear regression was calculated to predict IPV when the person reported feeling distant or cut off from other people. A significant regression equation was found, $F(1,226) = 15.82$, $p < .001$, $R^2 = .065$ (see Table 6). Participants' predicted IPV risk is equal to 28.24 + 2.82 (feeling distant or cut off from other people + IPV risk) when the independent variable is measured with the PCL-M. IPV risk increased 2.82 times for each agreement level about feeling distant or cut off from other people.

Participants reported feeling emotionally numb or being unable to have loving feelings for those close to you, which scores were compared to IPV risk. A linear regression was calculated to predict IPV when the person was feeling emotionally numb or being unable to have loving feelings for those close to you. A significant regression equation was found, $F(1,226) = 13.88$, $p < .001$, $R^2 = .058$ (see Table 6). Participants' predicted IPV risk is equal to 28.67 + 2.82 (feeling emotionally numb or being unable to have loving feelings for those close to you + IPV risk) when the independent variable is measured with the PCL-M. IPV risk increased 2.82 times for each agreement level about feeling emotionally numb or being unable to have loving feelings for those close to you.

Participants reported feeling as if their future will somehow be cut short, a symptom which was compared to IPV risk. A linear regression was calculated to predict IPV when the person reported feeling as if their future will somehow be cut short. A significant regression equation was found, $F(1,226) = 15.68$, $p < .001$, $R^2 = .065$ (see Table 6). Participants' predicted IPV risk is equal to 28.85 + 3.08 (feeling as if your future will somehow be cut short + IPV risk) when the independent variable is measured with the PCL-M. IPV risk increased 3.08 times for each agreement level about feeling as if your future will somehow be cut short.

Participants reported trouble falling or staying asleep, a symptom which was compared to IPV risk. A linear regression was calculated to predict IPV when the person reported trouble falling or staying asleep. A significant regression equation was found, $F(1,226) = 5.61$, $p < .05$, $R^2 = .024$ (see Table 6). Participants' predicted IPV risk is equal to 28.89 + 1.63 (trouble falling or staying asleep + IPV risk) when the independent variable is measured with the PCL-M. IPV risk increased 1.63 times for each agreement level about trouble falling or staying asleep.

Participants reported feeling irritable or having angry outbursts, a symptom which was compared to IPV risk. A linear regression was calculated to predict IPV when the person reported feeling irritable or having angry outbursts. A significant regression equation was found, $F(1,226) = 10.69$, $p < .05$, $R^2 = .045$ (see Table 6). Participants' predicted IPV risk is equal to 28.27 + 2.44 (feeling irritable or having angry outbursts + IPV risk) when the independent variable is measured with the PCL-M. IPV risk

increased 2.44 times for each agreement level about feeling irritable or having angry outbursts.

Participants reported having difficulty concentrating, a symptom which was compared to IPV risk. A linear regression was calculated to predict IPV when the person reported having difficulty concentrating. A significant regression equation was found, $F(1,226) = 14.99$, $p < .001$, $R^2 = .062$ (see Table 6). Participants' predicted IPV risk is equal to 28.23 + 2.94 (having difficulty concentrating + IPV risk) when the independent variable is measured with the PCL-M. IPV risk increased 2.94 times for each agreement level about having difficulty concentrating.

Participants reported being "super alert" or watchful on guard, a symptom which was compared to IPV risk. A linear regression was calculated to predict IPV when the person reported being "super alert" or watchful on guard. A significant regression equation was found, $F(1,226) = 6.56$, $p < .05$, $R^2 = .028$ (see Table 6). Participants' predicted IPV risk is equal to 29.23 + 1.71 (being "super alert" or watchful on guard + IPV risk) when the independent variable is measured with the PCL-M. IPV risk increased 1.71 times for each agreement level about being "super alert" or watchful on guard.

Participants reported feeling jumpy or easily startled, a symptom which was compared to IPV risk. A linear regression was calculated to predict IPV when the person reported feeling jumpy or easily startled. A significant regression equation was found, $F(1,226) = 5.85$, $p < .05$, $R^2 = .025$ (see Table 6). Participants' predicted IPV risk is equal to 29.57 + 1.87 (feeling jumpy or easily startled + IPV risk) when the independent

variable is measured with the PCL-M. IPV risk increased 1.87 times for each agreement level about feeling jumpy or easily startled. These regression equations were evidence the individual symptoms influence IPV risk by themselves, even when the model for them all together is nonsignificant.

Summary

This study included investigations into attachment styles, PTSD, TBI, and IPV in military couples. These investigations were conducted using the scores from survey instruments measuring attachment styles, PTSD, IPV risk, TBI diagnosis, and information provided on the demographics form. Test results were examined and relationships between these variables were discovered using the latest statistical software, IBM SPSS, with corresponding statistical packages. Using corresponding statistical packages allowed for the mediation analysis to be conducted. These results were interpreted through the research questions and associated hypotheses.

A factorial ANOVA was conducted to determine the relationships among the IVs, attachment styles, and PTSD. There was no correlation found between the independent variables, as the variance inflation factor was around 1. This eliminated the risk of multicollinearity between the independent variables. Many PTSD symptoms were predictive of IPV when studied individually, but not when PTSD was measured as a symptom level for diagnosis. Attachment styles were significant predictors of IPV.

A factorial ANOVA was conducted to determine the relationships between the IVs and the DV. The full model was examined to determine the relationships with the IVs, and each IVs relationship with DV. Based on the results, secure attachment was a

significant IPV predictor when paired with anxious attachment, but not when paired with avoidant attachment. Anxious attachment was a significant IPV predictor when paired with avoidant attachment. The results were interpreted with caution though, given the violated assumption.

A linear regression using the mediator function was conducted to determine if the relationships found in the previous statistical analysis could be explained though the MV, TBI. The mediation analysis was conducted to understand the influence TBI has on the relationships found between attachment styles, PTSD, and IPV. Mediation did not occur when TBI was added to the model for attachment styles and IPV, or when added to the model for attachment styles, PTSD, and IPV. Based on the data, the assertion can be made TBI plays no role in the relationship between attachment styles, PTSD, and IPV in military couples. The relationship between PTSD symptoms and TBI was significant, verifying the relationship found between these two variables in previous research.

Regression analyses were conducted to determine if individual PTSD symptoms had unique influences on IPV risk. A linear regression was conducted for each symptom reported from the PCL-M. Statistical significance was achieved for most, but not all, reported symptoms. The data were indicative practitioners should consider specific symptoms influencing IPV risk, as there is more to consider than diagnosis alone.

Within Chapter 5, these results are further discussed and compared with the research available on IPV in military couples. Investigating these findings more thoroughly allowed for these data to be interpreted in a way they can be applied to practice. The findings, based on the statistical analysis, are compared to the available

research. Comparing the results to existing research allowed for the findings of previous work to be confirmed or disconfirmed.

As means of assuring the findings can be applied to practice, limitations impacting the interpretation and their trustworthiness are considered. These limitations were based in the study's strengths and weakness, factors that are help with providing direction for future research. Recommendations for future research are presented based on these findings. Future research has potential, as the complexities surrounding IPV can be further understood, including how to help those in the military community suffering from interpersonal violence. As a conclusion, implications for social change are addressed. Understanding IPV could benefit military families and create a stronger fighting force.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

Intimate partner violence (IPV) is a social issue that has negatively impacted society for generations (Arnold, 2017). Even with the claims rates are declining, further research is needed to understand these behaviors in couples, as these results could be used to help these couples and bring about positive social change (Arnold, 2017). The purpose of the study was to investigate the relationships between attachment styles, posttraumatic stress disorder (PTSD), traumatic brain injury (TBI), and IPV in military couples. The study was conducted as a means of furthering the knowledge base on interpersonal violence occurring within military families. Survey results from the AAS, the IJS, and the PCL-M were examined, along with TBI diagnosis for each participant. Possible relationships among attachment styles, PTSD, and violence risk scores were evaluated. Whether TBI influenced these relationships was considered.

Based on the desire to understand these relationships statistically, cross-sectional quantitative methods were used. The risk for violence measured in the relationships was the dependent variable. The independent variables were attachment styles and PTSD symptomatology levels. The mediator variable was a TBI diagnosis from a medical practitioner. A factorial ANOVA and a linear regression using the mediator function were used to analyze these data. The data analyses, tables, and graphs were constructed using the latest IBM SPSS statistics software.

The population chosen was based on the existing gap in the understanding of IPV in military couples. The gap included the relationship between IPV and military-specific

experiences (Gerber et al., 2014). The relationships between IPV, attachment styles, and mental disorders needed further examination (Karakurt, Silver, & Keiley, 2016). The attachment framework was chosen because behavior and genetics were used to make attachment theory what it is today (Ainsworth et al., 2015), enabling the complexities of attachment to be considered. The choice of attachment theory allowed for understanding independent variables on a deeper level than was possible in previous work. Other options considered were biological, psychological, social disorganization, and feminist theories. Attachment theory was chosen over these based on the complex background of the theory (Wallace & Roberson, 2015).

The possibility a relationship existed between attachment styles, PTSD, TBI, and IPV in relationships was determined by the statistical significance of the factorial ANOVA and mediation analysis performed. Prior to data analysis, the extent of the relationships present among the independent variables was anticipated to be statistically significant for insecure attachment styles, high PTSD levels, and higher IPV risk. TBI mediating these relationships was anticipated. Key findings from the study were indicative the relationships were more complicated than initially suspected. These findings were used to address the presented research questions and associated hypotheses.

The results of this study are evidence of statistically significant relationships between attachment, PTSD, and IPV within military couples. Anxious attachment, when coupled with secure attachment, is a significant predictor for IPV risk. Avoidant attachment, when paired with anxious attachment, is a significant predictor for IPV risk.

Other key findings included the interactions of attachment styles and specific PTSD symptom levels being an influence on IPV risk.

Although the average PTSD scores were not an increased risk for violence, when attachment styles were considered, the model was significant. The interaction effects between attachment styles, PTSD, and IPV were statistically significant. The interactions of symptom levels represented a risk factor for violence, even with the nonsignificant model. Which symptoms the participant experienced represented another key finding, because many symptoms alone were a risk for IPV. Although the model for PTSD was nonsignificant, many symptoms with average levels were related to an increased IPV risk.

Other key findings included the lack of a significant mediational effect when TBI was added to the models. TBI was not an influence on IPV risk, which may have been a measurement issue. This issue may have been based in the overlap between PTSD symptoms and TBI symptoms. TBI diagnosis was expected to apply to soldiers only, given the risk for such injury during combat deployments, but some civilians reported being diagnosed with the injury. The idea relationships influencing violence in military couples were more complex than anticipated was further supported by these reported civilian TBIs. These key findings, significant and nonsignificant, were interpreted as they related to the existing body of research.

Interpretation of the Findings

The findings were compared with existing research to understand the ways in which they were interpreted. The findings were interpreted using attachment theory, the

framework for this study. The interaction of attachment styles within relationships played a key role in violence risk. The findings were confirmation securely attached persons can behave like insecurely attached persons (Beck et al., 2013). Pairings of secure attachment with anxious attachment were susceptible to more relationship issues (Beck et al. 2013). Consistent with the Beck et al. (2013) study, the results presented are evidence the interaction of attachment styles should be considered when evaluating at-risk couples. The influence anxious attachment has on behavior may be a key factor in IPV risk when the partners within a couple have differing attachment styles.

The idea attachment should be a focus in therapy is supported within these results (Godbout et al., 2017). The longitudinal study referenced is confirmation attachment styles influence violence levels within relationships (Godbout et al., 2017). While the study focused on insecure attachment styles being a risk for violence, their results may be compared to the ones presented. Anxious and avoidant attachment styles were found to be a risk factor for violence for practitioners to focus on during interventions (Godbout et al., 2017). The interaction effects found within the presented results were not considered but should be, given the lack of a significant relationship between avoidant and secure attachments in couples. The ideas about insecure attachment found in studies are suggestive altering attachment styles in therapy is an effective way to combat interpersonal issues within relationships, including violence (Dekel et al., 2015).

Healthier couples may be created though interventions or targeted prevention programs, based on evidence regarding the effects attachment styles have on interpersonal relationships. Prevention programs with a focus on attachment can provide

information on how to avoid violent conflicts within relationships (McDermott & Lopez, 2013). The interactions were not confirmed within the ideas for prevention programs but may be considered when working with couples with insecure attachment styles. In light of these ideas, attachment theory may be an empirically sound method for designing prevention and intervention programs. The impact PTSD has on these couples was another aspect of the results to consider.

Given attachment styles were included in the model, the study is evidence regarding other variables negating correlations between PTSD and IPV (Sullivan & Elbogen, 2014). Comparing this to the findings presented, the PTSD relationship was nonsignificant as a main effect when attachment was included. In view of previous research, attachment styles are key to understanding the relationships interpersonal violence has with other variables such as mental disorders. The findings may also have been influenced by the survey tools used.

When one is interpreting the relationships between IPV and PTSD, the way the relationship between these two variables fluctuates depending on the measurement tools used should be considered (Woodhouse et al., 2015). The different studies in this meta-analysis used various means of measuring PTSD and attachment (Woodhouse et al., 2015). The presented findings may not be a reflection of other studies where semistructured interviews or scales measuring subcategories of attachment were used. The results being interpreted did not involve semistructured interviews or more attachment categories, which may account for any different interpretations made. Based

on the ideas presented, more research is needed using the instruments from previous work.

The results regarding the relationship between PTSD and IPV perpetration as being significant were disconfirmed (Okuda et al., 2015). Okuda et al. (2015) found a significant relationship between PTSD and relationship violence, whereas nonsignificant results were found in this study. These findings may have been disconfirmed based on the measurement tools and methods used. The Alcohol Use Disorder and Associated Disabilities Interview Schedule—DSM-IV Version (AUDADIS-IV), Wave 2 version was used to measure psychological disorders, and odds ratios were determined when the significant results were obtained (Okuda et al., 2015). The use of a PTSD scale rather than one measuring multiple disorders may have been the reason for differing results, along with the differing methods of statistical analysis. Considering the finding, the relationship should be studied further, using the same instruments other researchers have used.

The findings are suggestive of the idea not all who develop PTSD symptomatology behave aggressively in relationships (Van Voorhees et al., 2014). Whether the soldier was externalizing PTSD symptoms played a role in the risk for engaging in relationship violence (Van Voorhees et al., 2014). Based on different studies, including the one presented here, PTSD alone does not play a role in IPV within military couples (Sherman, Fostick, & Zohar, 2014). The results add to the research on PTSD and IPV in military couples while furthering the idea relationship violence is a complex social issue.

Even though the main effects between PTSD and IPV were statistically nonsignificant, different symptoms represented a risk for IPV. The relationships previously discovered regarding high PTSD scores and increased aggression in a relationship were confirmed (Miller et al., 2013), to an extent. When one member of the couple experienced high symptom levels and the partner experienced no or low symptom levels, there was a significant relationship with IPV risk. Given these findings on interacting PTSD levels and IPV, including PTSD in programs for military families could increase the ability to help these couples, when protective factors such as social support are incorporated (Vasterling et al., 2015). These similar findings are indicative PTSD symptoms should be looked at specifically when evaluating IPV risk, rather than a diagnosis. This may be done by focusing on which symptoms are reported, even when the threshold for diagnosis is not met. The symptoms themselves might be a stronger influence than the diagnosis alone.

The statistically nonsignificant relationship between PTSD and IPV was further examined, as individual symptoms can influence IPV risk. The results were confirmation the relationships between PTSD symptoms and IPV were statistically significant when studied alone (Sullivan & Elbogen, 2014). The Davidson Trauma Scale was used, with a correlational analysis used as the statistical method (Sullivan & Elbogen, 2014). Given the differing measurement instruments and statistical methods, the results should be compared with a degree of caution. The connection between hyperarousal symptoms and interpersonal violence were another confirmed relationship (Taft, 2013). The methods used for discovering this relationship were not presented but were noted as support for

the survival mode as an explanation for aggression in military members (Taft, 2013). These findings were indicative PTSD symptoms themselves play unique roles in IPV risk for military couples.

In assessing the relationship between PTSD and TBI, one should consider overlapping symptoms, given combat is only one way traumatic brain injury can occur. An individual who has been involved with IPV as a victim could be diagnosed with a TBI if he or she experienced a head or neck injury (Zieman, Bridwell, & Cardenas, 2017). Some civilian participants reported being diagnosed with a TBI, and the findings confirmed the injury might be related to nonmilitary events. Considering the results, the study is confirmation there is still not enough known about the relationship between the two conditions (Walker, McDonald, & Franke, 2014). Further research is needed to differentiate between these two conditions, along with their unique impact on IPV risk.

The nonsignificant results from the mediation analysis of PTSD and TBI can be interpreted in the context of the findings. The overlapping symptoms between the two conditions are well documented (Boehnlein & Hinton, 2016). These overlapping symptoms include difficulties concentrating, sleep issues, irritability, impulsive behaviors, anxious behavior, and depression (Boehnlein & Hinton, 2016). Similarities between PTSD and TBI could confound potential relationships between these two variables. Based on the overlap, a chance exists the relationship was not detected statistically. Further evidence regarding this assertion is in the statistical significance found in the relationships between PTSD and TBI. Their relationship with one another may have influenced the mediation analysis results.

The study was a means of confirming or disconfirming ideas about IPV in military couples. The interpretations were based in the statistical significance, or nonsignificance, found during the analyses. These interpretations were applied to the findings with caution, though. The cautious interpretation resulted from statistical analysis concerns, as an assumption was violated, and the limitations of the conducted research. The limitations can help in understanding the ways in which these results can be interpreted and directions for future research.

Limitations of the Study

Even with the interpretation of the findings, limitations must be considered. The first limitation is the inability to determine causation with the results, a known limitation of the cross-sectional quantitative method (Frankfort-Nachmias et al., 2015). Although relationships were found between the variables, no assertions will be made about attachment styles, PTSD, or TBI causing IPV. The limitation was known before data collection, eliminating any expectations about the findings being indicative of a definitive cause of violence in military relationships.

One limitation was whether the results could be generalized to the entire military population, as the representation of reserve soldiers was not adequate. Although the sample was quite diverse in terms of active duty couples, few reserve soldiers participated. Based on this limitation, the results may best represent violence risk in couples with active duty soldiers. Understanding the risk present in reserve soldiers is important, as greater injury levels occur within these relationships when the soldier was

exposed to combat (Heavey, Homish, Goodell, & Homish, 2017). These results are suggestive the findings do not depict the more severe IPV cases within the military.

As the study was reliant on participants' self-report surveys, social desirability bias was a limitation. There is a chance the participants gave untruthful responses to the survey questions (Creswell, 2014). All participants were ensured confidentiality and anonymity, which may have dissuaded them from misrepresenting facts. Even with the measures taken, participants could have underreported the IPV risk levels in their relationships or the PTSD symptoms levels they were experiencing. Because this limitation is common in research on IPV, the lack of disclosure was expected. This was one reason for being so adamant about confidentiality and anonymity for the participants.

The ways in which the data were gathered represented a limitation, because the instruments, constructs of interest, or statistical methods may have influenced the results. The instruments, while scored as valid and reliable, may not have accurately depicted the constructs of interest. This is important to note, because the IJS is a tool for measuring risk and not any actual violence within relationships. Researchers using other instruments may have come up with different results, even with the same participants used in the study presented.

Another limitation, considered in previous research, was whether the individual's attachment style changed or if they experienced mental distress not related to PTSD. The attachment styles prior to becoming associated with the military, or before any PTSD symptoms developed, were not documented. Understanding attachment styles, including their impact on PTSD and IPV, may not be as clear because of this limitation. There is

the issue regarding other variables potentially impacting the results to consider. Some variables considered include alcohol use, preexisting psychological issues or disorders, military experiences, or the meaning made of these experiences. Assumptions were made no other variables would influence the relationships found. Without knowledge surrounding issues, such as other mental disorders or specific military experiences, unknown confounding variables are a limitation.

Whether other factors documented in previous studies influenced IPV, aside from mental disorders or attachment changes, is a limitation to the results. Other variables, such as alcohol abuse, substance abuse, and patriarchal values are associated with IPV risk (Klaw, Demers, & Da Silva, 2016; Reidy et al., 2014). Their influence on the results was not considered, because these factors were not included in the statistical analysis. This limitation is one that should be considered, given the complex nature of IPV. The limitation is noted as a weakness within the presented study.

Although the sample size calculated was deemed appropriate for the desired analyses, there could be concern regarding the distribution of attachment styles and PTSD symptomatology levels among participants. Participants presenting with a secure attachment style (n = 129) made up over half the population, whereas those individuals with anxious (n = 38) or avoidant (n = 61) attachment styles made up 16.7% and 26.8% of the population, respectively. Participants reporting no PTSD symptoms (n = 59) and low symptom levels (n = 91) made up 65.8 %, the majority of the population, moderate symptom levels (n = 44) were 19.3% of the population, and high symptom levels (n = 34) were 14.9% of the population. The uneven distribution of attachment styles and PTSD

symptom levels limited the ability for the results to be represent the population. The significant Levene's test may have been caused by the uneven distribution. Based on the limitations described, the results were interpreted with caution. Recommendations for future research are made with these limitations in mind.

Recommendations

No definitive, or simple, answer for why violence occurs within military relationships exists. Understanding which variables are an influence on the risk of violent behaviors can advance programs designed to address the social issue, though. Recommendations for future research are made based on these findings, while considering the study's strengths and limitations. The complex nature of IPV in military couples could be addressed with these recommendations.

One recommendation based on this study's results is to conduct a mixed methods study. A mixed methods approach will allow for a deeper understanding regarding attachment, PTSD, and IPV. Researchers can add to the body of knowledge by measuring attachment, PTSD, and relationship violence with survey tools, and asking open ended questions about changes in attachment or relationships since joining the military. The recommended method would allow for an understanding on whether the military lifestyle has changed the attachment style or relationship behaviors within the couple. A mixed methods design would allow for researchers to understand the impact different deployment experiences have on attachment and PTSD symptomatology from a qualitative perspective. Researchers previously found experiences during deployment provide the soldier with strength, rather than leading to PTSD or relationship issues

(Brenner et al., 2015). Considering the impact these experiences have on soldiers can increase the understanding related to relationships between combat experience interpretation, PTSD development, and IPV within the military.

Another recommendation based on difficulties in meeting the minimum sample size, a weakness of this study, is repeating the procedures using military resources. This method would allow for more access to potential military participants. One venue that could be used for further research is the programs for those who feel at risk for violent behaviors in their relationship. Reaching out to individuals who successfully completed the programs to discuss how their relationship was in conflict before is another option for recruitment using military resources. Targeted recruitment for these military participants may provide more details about variables influencing violence risk in relationships.

Using dual theories, attachment included, is another recommendation for future research. In recent studies, researchers had success in understanding IPV using the target congruence theory. Target congruence theory is an explanation for IPV as the result of specific interactions in couples, such as IPV victims being sought after based on the traits they possess (Sween & Reyns, 2017). A partner might feel they can manipulate these traits in his or her favor (Sween & Reyns, 2017). A more comprehensive understanding about the reasons couples engage in IPV may come from using attachment theory and target congruence theory.

Social learning theory is another way to further understand the relationship between attachment styles and IPV. Given the discussion on the risk for those who witness IPV being perpetrators later in life, the ideas regarding association or imitation

found within social learning theory can be used when explaining violent behaviors (Cochran, Maskaly, Jones, & Sellers, 2017). Looking at IPV from more than one angle could improve the chances prevention and intervention programs might cater to individuals involved in these behaviors (Burge et al., 2014). This therapeutic method should be more effective (Burge et al., 2014). The recommendations will allow for a more advanced understanding about which variables have a direct influence on IPV or mediate any relationships found.

Understanding IPV in military families can come from the Dyadic Reponses to Trauma (DRT) model. DRT is a recommended theoretical framework for understanding IPV, as the research using this theory was suggestive trauma either negatively impacts a relationship or leads to posttraumatic growth within couples (Marshall & Kuijer, 2017). As military couples are at risk for experiencing trauma, posttraumatic growth would be preferable to PTSD or the issues associated with developing the disorder. The model is one option for further research which could increase the understanding about the influence trauma has on interpersonal functioning. Evaluating the impact other variables have on IPV is a way to increase the understanding of these behaviors in military couples.

Including alcohol and drug abuse measurements in future research is another recommendation based on previous research. There is a relationship between PTSD, drug misuse, and IPV within the veteran population (Kelley et al., 2017). Mediation by drug abuse is more evidence there is a complicated relationship between PTSD and IPV. The relationship between alcohol and violence is evidence alcohol can be used for stress reduction, but only when consumption begins before the triggering event (Eckhardt &

Parrott, 2017). Alcohol consumption as an influence on IPV should be more thoroughly investigated, based on the association with stress. Notwithstanding these recommendations for future studies, the presented results come with implications for positive social change and the ways IPV is addressed by practitioners.

Implications

The research method was designed to examine the possible relationships between attachment styles, PTSD, and IPV risk in military couples. Further consideration was given to the influence TBI has on any statistically significant relationships. Further research could be help with clarifying these relationships, while being a way for obtaining practical significance. The ability to predict violent behaviors within relationships would be beneficial to different fields, including psychology and military psychology. The findings presented should not be considered all inclusive, given the complexities surrounding IPV. Additional research is needed to put the presented ideas into action.

Preferably, the findings from additional research based on recommendations in the previous section might assist practitioners. Practitioners could enhance programs when they understand the relationships between specific attachments styles, PTSD, and violent behaviors displayed by military couples. More evidence is required before these enhancements can be made, as the ideas must be accepted throughout the profession for implementation to occur. For example, a relationship found between attachment styles and IPV sheds further light on the ways military couples deal with interpersonal conflict.

These relationships are unique depending on the experiences the soldiers and their spouses have.

These results come with the potential for positive social change on different levels. The potential for positive change is based on the results and negative repercussions IPV has on different levels. On an individual level, positive social change can occur by applying attachment theory to therapy, if the method is applied in an appropriate way. Attachment based therapy is a way to improve the mental health of those at risk. Those who are more securely attached are at less risk for IPV, based on the results presented. Being an IPV victim comes with the risk for developing depression and suicide ideation (Wolford-Clevenger, & Smith, 2017), among other negative repercussions. These risks will be lowered with programs focused on developing secure attachments.

Overall, the chance exists the quality of life for an individual can be improved with the more effective programs. There is evidence life quality may be improved, as it has been documented IPV negatively impacts IPV victims' life quality (Koshy & Kaushik, 2017). These changes might come about when the trauma related to IPV is avoided, as relationship violence may shatter a person's sense of trust (McFarlane & Harvey, 2017). The potential for positive social change on an individual level can influence positive social change on a family level.

On a family level the potential for positive social change includes the chance to reduce the risk of familial issues. Children who are raised in families with less violence grow up to be well adjusted adults, placing them at lower risk for mental illness or

becoming involved with IPV in the future. Being exposed to IPV during one's childhood is a risk factor for engaging in these behaviors as an adult (Ruddle, Pina, & Vasquez, 2017). Based on these results, IPV exposure should be considered during risk assessments. If IPV is prevented, the risk future generations will continue the violence cycle will decrease.

Another aspect of positive change, on a familial level, is preventing the effects divorce has on children when relationship violence is not addressed. Children whose parents divorce suffer from problems in school, teen pregnancy, and a lack of employability as an adult (Lehrer & Son, 2017). The root cause for these issues is often identified as the way parents behave post-divorce (Lehrer & Son, 2017). Decreasing IPV risk in a household may lower the chances of a child being traumatized from a divorce (Ehrensaft, Knous-Westfall, & Cohen, 2017). Positive parenting styles can buffer the effect IPV has at lower levels (Ehrensaft et al., 2017). Considering the evidence, protective factors against IPV, such as secure attachments, could promote the family's health.

On an organizational level, positive social change may come from improved health to soldiers and their families. Evidence is suggestive the health of family members is integral to a soldier's health and well-being (Dolphin, Steinhardt, & Cance, 2015). Creating healthier families can create a stronger fighting force, whose soldiers show greater resilience when faced with conflict (Clever & Segal, 2013). Individual consequences of IPV, especially if the victim is the soldier, could be felt on an organizational level. Mental and physical abuse might interfere with a victim's ability to

function properly at work (Sotiropoulos, 2017). The assertion regarding the impact IPV has on a person's ability to function in their job could be addressed with more effective programs.

These changes could ripple into a society level change, as small positive changes can lead to larger ones. On a societal level, positive social change may be seen in healthier families who influence one another to encourage healthy behaviors in those around them. IPV prevalence would be lowered, and be less of a social problem needing to be addressed. These violent behaviors could be prevented in at risk couples, as prevention is less expensive than interventions or treatment (Cadilhac et al., 2015). The cost reduction is motivation for creating effective prevention programs based in empirical evidence. The negative effects to mental health, or the risk for divorce and subsequent issues, could be avoided when families are healthier (Durham et al., 2013). Healthier families will lead to a healthier society, with less risk for the many repercussions IPV has.

These implications for social change on each level consider the available research base and the results presented. As IPV is a complex issue, the results are not a guarantee these potential changes will come to fruition. A chance does exist to use these ideas to guide future research on IPV, though (Chester & DeWall, 2017). The prevalence of violent behavior in society may be reduced (Chester & DeWall, 2017). With reduced IPV rates comes a chance the military population will be healthier, providing more chances for military families to leave a positive imprint on the world around them.

Implications can be made based on the methodological, theoretical, and empirical findings. Methodological implications include the ability to understand the impact multiple variables have on IPV using quantitative methods. Evaluating multiple influential variables at once to understand the complexities of IPV is a recommended research method (Taft et al., 2014). These results are indicative the relationships with IPV are complicated, and not enough is known about them. These results, using quantitative methods, add to the body of empirical evidence on ways attachment theory should be used when addressing IPV. Theoretical implications can be made based on the results, including the need to use attachment theory to improve the mental health of military families and create more effective programs to address IPV.

Recommendations for practice can be made based on the findings presented in the preceding sections. One recommendation, based on the confirmation relationships exist between attachment styles and IPV, is focusing therapeutic methods on creating secure attachments. Assertions have been made previously about attachment based therapy being an effective way to create healthier individuals (Bucci et al., 2015). The results presented are more evidence regarding the need to focus on attachment when assisting those with PTSD or interpersonal problems. The method has been recommended for practice not only with civilians, but specifically with the military population (Tasso et al., 2016). Programs would be improved if these results are considered, and further research is conducted.

The intention was to add to a limited knowledge base regarding attachment styles, PTSD, TBI, and IPV. Progress toward positive social change based on the results is

presented, and may come to fruition if the recommendations for future research are fulfilled. In using these results to promote further research, the possibility for practitioners to develop more effective intervention options has grown. The chance effective prevention programs will be designed is increased. These results have provided a stepping-stone to understanding the influences different variables have on IPV risk for military couples.

Conclusion

These results could potentially be a way to create positive social change. Violent behavior, specifically interpersonal violence, is rampant across the world, negatively impacting society. If a relationship or predictable model can be found, more effective prevention programs for these violent behaviors may be established, resulting in a safer society. Intervention programs can be improved when couples are identified as engaging in violent behaviors, as the risk these couples pose would be lowered. These benefits would be seen across various populations, including the improved health of the military population.

The future direction for researching IPV in military couples includes using a larger participant pool to determine, more comprehensively, the relationships between attachment styles, PTSD, TBI, and IPV. The fact attachment styles and PTSD together, and attachment styles alone, are great violence predictors is supported by this study's results. These results are an addition to the research on IPV in the military, and empirical evidence for therapeutic methods in use. The results did not provide definitive answers or increase IPV predictability for attachment styles and PTSD symptomatology. The

findings were a way to provide future pathways into research inclusive of attachment styles, PTSD, TBI, and IPV, though.

Using attachment to guide both intervention and prevention programs will benefit the military population. Individualized programs, focused on attachment styles, should benefit the mental health of soldiers and their spouses. The chance for improving programs and creating a stronger fighting force will come about based on this research. The relationships correlating with IPV are complex, therefore understanding the impact different variables have could influence the way programs are designed to meet the individual needs of those at risk.

Not enough is understood about relationship violence (Hamby, 2017), but the results presented are help with filling this knowledge gap. Researchers suggested the prevalence and impact these behaviors have will not be addressed until they are better understood (Hamby, 2017). Understanding attachment styles and PTSD interaction effects on IPV was a way to address this concern. Increased strength for military families will improve our fighting force by addressing issues specific to these families. Even though practitioners cannot accurately predict all cases of IPV, improved programs will ensure the military community is healthier, as they will pose less risk for engaging in violent behavior.

References

Adejimi, A. A., Fawole, O. I., & Sekoni, O. O. (2015). Prevalence and correlates of intimate partner violence among male military personnel and civil servants in Ibadan, Nigeria: A comparative study. *International Journal of Epidemiology, 44*(Suppl. 1), 51-60. doi:10.1093/ije/dyv096.092

Afari, N., Pittman, J., Floto, E., Owen, L., Buttner, M., Hossain, N., ... Lohr, J. B. (2015). Differential impact of combat on postdeployment symptoms in female and male veterans of Iraq and Afghanistan. *Military Medicine, 180*(3), 296-303. doi:10.7205/MILMED-D-14-00255

Afifi, T. O., Taillieu, T., Zamorski, M. A., Turner, S., Cheung, K., & Sareen, J. (2016). Association of child abuse exposure with suicidal ideation, suicide plans, and suicide attempts in military personnel and the general population in Canada. *JAMA Psychiatry*, *73*(3), 229-238. doi:10.1001/jamapsychiatry.2015.2732

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. N. (2015). *Patterns of attachment: A psychological study of the strange situation* (pp. 1-22). New York, NY: Psychology Press.

Alfred, G. C., Hammer, J. H., & Good, G. E. (2014). Male student veterans: Hardiness, psychological well-being, and masculine norms. *Psychology of Men & Masculinity, 15*(1), 95-99. doi:10.1037/a0031450

Alvarez, A., & Bachman, R. (2014). Explaining violence. In A. Alvarez & R. Bachman (Eds.), *Violence: The enduring problem* (2nd ed., pp. 25- 51). London, England: Sage.

American Psychological Association. (2017). *Intimate partner violence facts & resources*. Retrieved from http://www.apa.org/topics/violence/partner.aspx

Angkaw, A. C., Ross, B. S., Pittman, J. E., Kelada, A. Y., Valencerina, M. M., & Baker, D. G. (2013). Post-traumatic stress disorder, depression, and aggression in OEF/ OIF veterans. *Military Medicine, 178*(10), 1044-1050. doi:10.7205/MILMED-D-13-00061

Arnold, G. (2017). U.S. women's movements to end violence against women, domestic abuse, and rape. In H. J. McClammon, V. Taylor, J. Reger, R. L. Einwohner (Eds.), *The Oxford handbook of U.S. women's social movement activism* (pp. 270-290). New York, NY: Oxford University Press.

Aronson, K. R., Perkins, D. F., & Olson, J. (2014). Epidemiology of partner abuse within military families. *Journal of Family Social Work, 17*(4), 379-400. doi:10.1080/10522158.2014.921880

Baltar, F., & Brunet, I. (2012). Social research 2.0: Virtual snowball sampling method using Facebook. *Internet Research, 22*(1), 57-74. doi:10.1108/10662241211199960

Barry, R. A., & Lawrence, E. (2013). "Don't stand so close to me": An attachment perspective of disengagement and avoidance in marriage. *Journal of Family Psychology, 27*(3), 484-494. doi:10.1037/a0032867

Baugher, A. R., & Gazmararian, J. A. (2015). Masculine gender role stress and violence: A literature review and future directions. *Aggression & Violent Behavior, 24*, 107-112. doi:10.1016/j.avb.2015.04.002

Beck, L. A., Pietromonaco, P. R., DeBuse, C. J., Powers, S. I., & Sayer, A. G. (2013). Spouses' attachment pairings predict neuroendocrine, behavioral, and psychological responses to marital conflict. *Journal of Personality and Social Psychology, 105*(3), 388. doi:10.1037/a0033056

Bell, K. M., & Higgins, L. (2015). The impact of childhood emotional abuse and experiential avoidance on maladaptive problem solving and intimate partner violence. *Behavioral Sciences*, *5*(2), 154-175. doi:10.3390/bs5020154

Belsky, J. (2016). Marital violence in evolutionary perspective. In A. Booth, A. C. Crouter, M. L. Clements, & T. Boone-Hollday (Eds.), *Couples in conflict: Classic edition* (pp. 27-36). New York, NY: Routledge.

Benavides, L. (2015). Protective factors in children and adolescents exposed to intimate partner violence: An empirical research review. *Child & Adolescent Social Work Journal, 32*(2), 93-107. doi:10.1007/s10560-014-0339-3

Beyer, K., Wallis, A. B., & Hamberger, L. K. (2015). Neighborhood environment and intimate partner violence: A systematic review. *Trauma, Violence & Abuse, 16*(1), 16–47. doi:10.1177/1524838013515758

Bjornestad, A. G., Schweinle, A., & Elhai, J. D. (2014). Measuring secondary traumatic stress symptoms in military spouses with the posttraumatic stress disorder checklist military version. *Journal of Nervous and Mental Disease, 202*(12), 864-869. doi:10.1097/NMD.0000000000000213

Blow, A. J., Curtis, A. F., Wittenborn, A. K., & Gorman, L. (2015). Relationship problems and military related PTSD: The case for using emotionally focused

therapy for couples. *Contemporary Family Therapy, 37*(3), 261-270. doi:10.1007/s10591-015-9345-7

Blumenstein, L., & Jasinski, J. L. (2015). Intimate partner assault and structural-level correlates of crime: Exploring the relationship between contextual factors and intimate partner violence. *Criminal Justice Studies: A Critical Journal of Crime, Law & Society, 28*(2), 186-210. doi:10.1080/1478601X.2014.1000488

Boehnlein, J. K., & Hinton, D. E. (2016). From shell shock to PTSD and traumatic brain injury: A historical perspective on responses to combat trauma. In, *Culture and PTSD: Trauma in global and historical perspective* (pp.155-176). Philadelphia, PA: University of Pennsylvania Press.

Bonache, H., Gonzalez-Mendez, R., & Krahé, B. (2016). Adult attachment styles, destructive conflict resolution, and the experience of intimate partner violence. *Journal of Interpersonal Violence*, 1-23. doi:10.1177/0886260516640776

Bowlby, J. (1940/2005). The influence of early environment in the development of neurosis and neurotic character. In R. D. Hinshelwood (Ed.) *Influential papers from the 1940s: Papers from the decades in International Journal of Psychoanalysis* (pp. 251- 275). London, England: Karnac Limited.

Bowlby, J. (1952). Some origins of mental ill-health. In J. Bowlby (Ed.), *Maternal care and mental health* (Vol. 2, pp. 11-14). Geneva, Switzerland: World Health Organization.

Bowlby, J. (1958). The nature of the child's tie to his mother. *International Journal of*

Psychoanalysis, 39, 350-73. Retrieved from http://www.psychology.sunysb.edu/attachment/online/nature%20of%20the%20childs%20tie%20bowlby.pdf

Bowlby, J. (1976). Prototypes of human sorrow. In *Separation: Anxiety and anger* (Vol. 2, pp. 3-24). New York, NY: Basic Books.

Bowlby, J. (1982). Observations to be explained. In, *Attachment and loss: Vol. 1 Attachment*, (2nd ed., pp. 24-36). New York, NY: Basic books.

Breiding, M. J., Smith, S. G., Basile, K. C., Walters, M. L. Chen, J., & Merrick, M. T. (2015). Prevalence and characteristics of sexual violence, stalking, and intimate partner violence victimization-National intimate partner and sexual violence survey, United States, 2011. *American Journal of Public Health, 105*(4), E11. Retrieved from http://origin.glb.cdc.gov/mmwr/preview/mmwrhtml/ss6308a1.htm?s_cid=ss6308a1_e

Bremner, J. D. (2016). PTSD and mild traumatic brain injury. In, *Posttraumatic stress disorder: From neurobiology to treatment* (pp. 321-344). Hoboken, NJ: John Wiley & Sons.

Brenner, L. A., Betthauser, L. M., Bahraini, N., Lusk, J. L., Terrio, H., Scher, A. I., & Schwab, K. A. (2015). Soldiers returning from deployment: A qualitative study regarding exposure, coping, and reintegration. *Rehabilitation Psychology, 60*(3), 277-285. doi:10.1037/rep0000048

Bretherton, I. (1992). The origins of attachment theory: John Bowlby and Mary Ainsworth. *Developmental Psychology, 28*(5), 759-775. doi:10.1037/0012-1649.28.5.759

Brockman, C., Snyder, J., Gird, S. R., Quattlebaum, J., Schmidt, N., Pauldine, M. R., ... DeGarmo, D. (2016). Relationship of service members' deployment trauma, PTSD symptoms, and experiential avoidance to postdeployment family reengagement. *Journal of Family Psychology, 30*(1), 52-62. doi:10.1037/fam0000152

Brown, J., Burnette, M. L., & Cerulli, C. (2015). Correlations between sexual abuse histories, perceived danger, and PTSD among intimate partner violence victims. *Journal of Interpersonal Violence, 30*(15), 2709–2725. doi:10.1177/0886260514553629

Bruenig, D., Morris, C. P., Young, R. M., & Voisey, J. (2015). Stress and resilience in combat-related PTSD: Integration of psychological theory and biological mechanisms. In C.R. Martin, V. R. Preedy, & V. B. Patel (Eds)*, Comprehensive Guide to Post-Traumatic Stress Disorder* (pp. 1-19). Cham, Switzerland: Springer International.

Bryant, R. A. (2016). Social attachments and traumatic stress. *European Journal of Psychotraumatology, 7*. doi:10.3402/ejpt.v7.29065

Bryant, R. A., Creamer, M., O'Donnell, M., Forbes, D., Felmingham, K. L., Silove, D., ... Nickerson, A. (2017). Separation from parents during childhood trauma predicts

adult attachment security and post-traumatic stress disorder. *Psychological Medicine, 47*(11), 2028-2035. doi:10.1017/S0033291717000472

Bucci, S., Roberts, N. H., Danquah, A. N., & Berry, K. (2015). Using attachment theory to inform the design and delivery of mental health services: A systematic review of the literature. *Psychology and Psychotherapy: Theory, Research and Practice, 88*(1), 1-20. doi:10.1111/papt.12029

Buck, N., Leenaars, P., Emmelkamp, P., & Marle, H. (2014). Personality traits are related to intimate partner violence among securely attached individuals. *Journal of Family Violence, 29*(3), 235-246. doi:10.1007/s10896-014-9584-7

Burge, S. K., Becho, J., Ferrer, R. L., Wood, R. C., Talamantes, M., & Katerndahl, D. A. (2014). Safely examining complex dynamics of intimate partner violence. *Families, Systems, & Health, 32*(3), 259-270. doi:10.1037/fsh0000013

Burge, S. K., Katerndahl, D. A., Wood, R. C., Becho, J., Ferrer, R. L., & Talamantes, M. (2016). Using complexity science to examine three dynamic patterns of intimate partner violence. *Families, Systems & Health: The Journal of Collaborative Family Healthcare, 34*(1), 4-14. doi:10.1037/fsh0000170

Busuito, A., Huth-Bocks, A., & Puro, E. (2014). Romantic attachment as a moderator of the association between childhood abuse and posttraumatic stress disorder symptoms. *Journal of Family Violence, 29*(5), 567-577. doi:10.1007/s10896-014-9611-8

Cadilhac, D. A., Sheppard, L., Cumming, T. B., Thayabaranathan, T., Pearce, D. C., Carter, R., & Magnus, A. (2015). The health and economic benefits of reducing

intimate partner violence: An Australian example. *BMC Public Health, 15*(1), 625-634. doi:10.1186/s12889-015-1931-y

Cameranesi, M. (2016). Battering typologies, attachment insecurity, and personality disorders: A comprehensive literature review. *Aggression and Violent Behavior, 28*, 29-46. doi:10.1016/j.avb.2016.03.005

Campbell, S. B., & Renshaw, K. D. (2016). Military couples and posttraumatic stress: Interpersonally based behaviors and cognitions as mechanisms of individual and couple distress. In S. MacDermid Wadsworth & D.S. Riggs (Eds.), *War and Family Life* (pp. 55-75). Cham, Switzerland: Springer International. doi:10.1007/978-3-319-21488-7_4

Cantos, A. L., & O'Leary, K. D. (2014). One size does not fit all in treatment of intimate partner violence. *Partner Abuse, 5*(2), 204-236. doi:10.1891/1946-6560.5.2.204

Cardinal, R. N., & Aitken, M. R. (2013). Understanding the basics. In, *ANOVA for the behavioral sciences researcher* (pp.7-12). New York, NY: Psychology Press.

Centers for Disease Control and Prevention (2016a). *Intimate partner violence.* Retrieved from http://www.cdc.gov/violenceprevention/intimatepartnerviolence/

Centers for Disease Control and Prevention (2016b). *Intimate partner violence: Definitions*. Retrieved from http://www.cdc.gov/violenceprevention/intimatepartnerviolence/definitions.html

Cesur, R., Sabia, J. J., & Tekin, E. (2013). The psychological costs of war: Military combat and mental health. *Journal of Health Economics, 32*(1), 51-65. doi:10.1016/j.jhealeco.2012.09.001

Chapman, A., & Monk, C. (2015). Domestic violence awareness. *American Journal of Psychiatry, 172*(10), 944-945. doi:10.1176/appi.ajp.2015.15070853

Chester, D. S., & DeWall, C. N. (2017). The roots of intimate partner violence. *Current Opinion in Psychology, 19*, 55-59. doi:10.1016/j.copsyc.2017.04.009

Choi, K., Im, H., Kim, J., Choi, K., Jon, D., Hong, H., ... Seok, J. (2013). Relationship of early-life stress and resilience to military adjustment in a young adulthood population. *Social Psychiatry & Psychiatric Epidemiology, 48*(11), 1767-1776. doi:10.1007/s00127-012-0647-x

Choo, E. K., Gottlieb, A. S., DeLuca, M., Tape, C., Colwell, L., & Zlotnick, C. (2015). Systematic review of ED-based intimate partner violence intervention research. *Western Journal of Emergency Medicine, 16*(7), 1037–1042. doi:10.5811/ westjem. 2015.10.27586

Church, D., & Brooks, A. J. (2014). CAM and energy psychology techniques remediate PTSD symptoms in veterans and spouses. *Explore: The Journal of Science and Healing, 10*(1), 24-33. doi:10.1016/j.explore.2013.10.006

Cigrang, J. A., Wayne Talcott, G., Tatum, J., Baker, M., Cassidy, D., Sonnek, S., ... Smith Slep, A. M. (2014). Impact of combat deployment on psychological and relationship health: A longitudinal study. *Journal of Traumatic Stress, 27*(1), 58-65. doi:10.1002/jts.21890

Clever, M., & Segal, D. R. (2013). The demographics of military children and families. *Future of Children, 23*(2), 13-39. doi:10.1353/foc.2013.0018

Cochran, J. K., Maskaly, J., Jones, S., & Sellers, C. S. (2017). Using structural equations

to model Akers' social learning theory with data on intimate partner violence. *Crime & Delinquency, 63*(1), 39-60. doi:10.1177/0011128715597694

Cohen, J. (1992). Quantitative methods in psychology: A power primer. *Psychological Bulletin, 112*(1), 155-159. Retrieved from http://classes.deonandan.com/hss4303/2010/cohen%201992%20sample%20size.pdf

Collett, D., & Bennett, T. (2015). Putting intimate partner violence on your radar. *Journal of the American Academy of Physician Assistants, 28*(10), 24-28. doi:10.1097/01.JAA.0000471606.69408.ac

Collins, N. L., & Read, S. J. (1990). Adult Attachment Scale. *Psyctests*, doi:10.1037/t01997-000

Coolican, H. (2014). Psychology, science, and research. In, *Research methods and statistics in psychology* (6th ed.; pp.3-31). New York, NY: Psychology Press.

Copel, L. C. (2015, July). Verbal abuse: The invisible wounds experienced by military wives. In *Sigma Theta Tau International's 26th International Nursing Research Congress*. Retrieved from http://www.nursinglibrary.org/vhl/bitstream/10755/601757/1/2_Copel_L_p71682_1.pdf

Corvo, K., & Johnson, P. (2013). Sharpening Ockham's Razor: The role of psychopathology and neuropsychopathology in the perpetration of domestic violence. *Aggression and violent behavior, 18*(1), 175-182. doi:10.1016/j.avb.2012.11.017

Crane, C. A., Hawes, S. W., Devine, S., & Easton, C. J. (2014). Axis I psychopathology

and the perpetration of intimate partner violence. *Journal of Clinical Psychology, 70*(3), 238-247. doi:10.1002/jclp.22013

Creswell, J. W. (2014). Quantitative methods. *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.; pp. 145-172). Thousand Oaks, CA: Sage.

Das, T. K., Alam, M., Bhattacharyya, R., & Pervin, A. (2015). Causes and contexts of domestic violence: Tales of help-seeking married women in Sylhet, Bangladesh. *Asian Social Work and Policy Review, 9*(2), 163-176. doi:10.1111/aswp.12055

Debell, F., Fear, N. T., Head, M., Batt-Rawden, S., Greenberg, N., Wessely, S., & Goodwin, L. (2014). A systematic review of the comorbidity between PTSD and alcohol misuse. *Social Psychiatry and Psychiatric Epidemiology, 49*(9), 1401-1425. doi:10.1007/s00127-014-0855-7

Dekel, R., MacDermid Wadsworth, S., & Sanchez, L. (2015). Stress, wounds, injuries, and meaning: The effects of combat-related PTSD on intimate relationships and partners. In R. Moelker, M. Andres, G. Bowen, & P. Manigart (Eds.), *Military families and war in the 21st century: Comparative perspectives* (pp. 161-176). New York, NY: Routledge.

Devries, K., Grundlingh, H., & Knight, L. (2016). Cycles of violence in gendered social contexts: Why does child maltreatment lead to increased risk of intimate partner violence in adulthood? In J. Gideon (Ed.), *Handbook on gender and health* (pp. 375-393). Cheltenham, UK: Edward Elgar Limited.

Dichter, M. E., Haywood, T. N., Butler, A. E., Bellamy, S. L., & Iverson, K. M. (2017).

Intimate partner violence screening in the veterans health administration: Demographic and military service characteristics. *American Journal of Preventive Medicine, 52*(6), 761-768. doi:10.1016/j.amepre.2017.01.003

Dichter, M. E., Wagner, C., & True, G. (2015). Timing of intimate partner violence in relationship to military service among women veterans. *Military Medicine, 180*(11), 1124-1127. doi:10.7205/MILMED-D-14-00582

Dillon, G., Hussain, R., Loxton, D., & Rahman, S. (2013). Mental and physical health and intimate partner violence against women: A review of the literature. *International Journal of Family Medicine, 2013*, 1-15. doi:10.1155/2013/313909

Dolphin, K. E., Steinhardt, M. A., & Cance, J. D. (2015). The role of positive emotions in reducing depressive symptoms among Army wives. *Military Psychology, 27*(1), 22-35. doi:10.1037/mil0000062

Durham, N. C., Gierisch, J. M., Shapiro, A., Grant, N. N., King, H. A., McDuffie, J. R. … Wing, L. (2013). *Intimate partner violence: Prevalence among US Military veterans and active duty servicemembers and a review of intervention approaches*. Retrieved from http://www.hsrd.research.va.gov/publications/esp/partner_violence-REPORT.pdf

Dutton, D., Tetreault, C., Karakanta, C., & White, K. (2014). Psychological factors in intimate partner violence. In C. A. Pietz & C. A. Mattson (Eds.), *Violent offenders: Understanding and assessment* (pp. 186- 215). New York, NY: Oxford University Press.

Eckhardt, C. I., & Parrott, D. J. (2017). Stress and intimate partner aggression. *Current*

Opinion in Psychology, 13, 153-157. doi:10.1016/j.copsyc.2016.09.005

Ehrensaft, M. K., Knous-Westfall, H., & Cohen, P. (2017). Long-term influence of intimate partner violence and parenting practices on offspring trauma symptoms. *Psychology of Violence, 7*(2), 296-305. doi:10.1037/a0040168

Elbogen, E. B., Johnson, S. C., Wagner, H. R., Sullivan, C., Taft, C. T., & Beckham, J. C. (2014). Violent behaviour and post-traumatic stress disorder in U.S. Iraq and Afghanistan veterans. *British Journal of Psychiatry, 204*(5), 368-375. doi:10.1192/bjp.bp.113.134627

Elder, G. A., Stone, J. R., & Ahlers, S. T. (2014). Effects of low-level blast exposure on the nervous system: Is there really a controversy? *Frontiers in Neurology*, *5*, 1-22. doi:10.3389/fneur.2014.00269

Eme, R. (2017). Neurobehavioral outcomes of mild traumatic brain injury: A mini review. *Brain Sciences, 7*(5), 1-5. doi:10.3390/brainsci7050046

Escolas, S. M., Arata-Maiers, R., Hildebrandt, E. J., Maiers, A. J., Mason, S. T., & Baker, M. T. (2012). The impact of attachment style on posttraumatic stress disorder symptoms in postdeployed military members. *U.S. Army Medical Department Journal*, 54-61. Retrieved from http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/ login.aspx?direct=true&db=a9h&AN=79808412&scope=site

Ferrajão, P. C., & Oliveira, R. A. (2015). Attachment patterns as mediators of the link

between combat exposure and posttraumatic symptoms: A study among Portuguese war veterans. *Military Psychology (American Psychological Association), 27*(3), 185-195. doi:10.1037/mil0000075

Field, A. (2013a). Factorial ANOVA (GLM 3). In *Discovering statistics using IBM SPSS statistics* (4th ed.; pp. 507-542). London, England: Sage.

Field, A. (2013b). Moderation, mediation, and more regression. In *Discovering statistics using IBM SPSS statistics* (4th ed.; pp. 392- 428). London, England: Sage.

Fisher, M. P. (2014). PTSD in the U.S. military, and the politics of prevalence. *Social Science & Medicine, 115*, 1-9. doi:10.1016/j.socscimed.2014.05.051

Fleming, P. J., Gruskin, S., Rojo, F., & Dworkin, S. L. (2015). Men's violence against women and men are interrelated: Recommendations for simultaneous intervention. *Social Science & Medicine, 146*, 249-256. doi:10.1016/j.socscimed.2015.10.021

Fonseka, R. W., Minnis, A. M., & Gomez, A. M. (2015). Impact of adverse childhood experiences on intimate partner violence perpetration among Sri Lankan men. *Plos ONE, 10*(8), 1-21. doi:10.1371/journal.pone.0136321

Forbes, D., & Bryant, R. A. (2013). When the violence of war comes home. *The Lancet, 381*(9870), 883-884. doi:10.1016/S0140-6736(13)60635-2

Ford, J. D., Grasso, D. J., Elhai, J. D., & Courtois, C. A. (2015). Understanding psychological trauma and posttraumatic stress disorder (PTSD). In *Posttraumatic stress disorder: Scientific and professional dimensions* (2nd ed; pp.1-42). San Diego, CA: Academic Press.

Frankfort-Nachmias, C., Nachmias, D., & DeWaard, J. (2015). Research designs: Cross-sectional and quasi-experimental designs. In *Research methods in the social sciences* (8th ed.; pp. 64-77). New York, NY: Worth.

Frey, L. M., Blackburn, K. M., Werner–Wilson, R. J., Parker, T., & Wood, N. D. (2011). Posttraumatic stress disorder, attachment, and intimate partner violence in a military sample: A preliminary analysis. *Journal of Feminist Family Therapy: An International Forum, 23*(3-4), 218-230. doi:10.1080/08952833.2011.604530

Gaher, R. M., Simons, J. S., Hahn, A. M., Hofman, N. L., Hansen, J., & Buchkoski, J. (2014). An experience sampling study of PTSD and alcohol-related problems. *Psychology of Addictive Behaviors, 28*(4), 1013-1025. doi:10.1037/a0037257

García-Pérez, M. A. (2012). Statistical conclusion validity: Some common threats and simple remedies. *Frontiers in Psychology, 3*, 325. doi:10.3389/fpsyg.2012.00325

Gartstein, M. A., & Iverson, S. (2014). Attachment security: The role of infant, maternal, and contextual factors. *International Journal of Psychology & Psychological Therapy, 14*(2), 261-276. Retrieved from http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=96419042&scope=site

Gerber, M. R., Iverson, K. M., Dichter, M. E., Klap, R., & Latta, R. E. (2014). Women veterans and intimate partner violence: Current state of knowledge and future directions. *Journal of Women's Health, 23*(4), 302-309. doi: 10.1089/jwh.2013.4513

Gerlock, A. A., Grimesey, J., & Sayre, G. (2014). Military-related posttraumatic stress

disorder and intimate relationship behaviors: A developing dyadic relationship model. *Journal of Marital and Family Therapy, 40*(3), 344-356.doi: 10.1111/jmft.1201

Godbout, N., Daspe, M. È., Lussier, Y., Sabourin, S., Dutton, D., & Hébert, M. (2017). Early exposure to violence, relationship violence, and relationship satisfaction in adolescents and emerging adults: The role of romantic attachment. *Psychological trauma: Theory, research, practice, and policy*, 9(2), 127. doi: 10.1037/tra0000136

Gonzalez, O. I., Novaco, R. W., Reger, M. A., & Gahm, G. A. (2015). Anger intensification with combat-related PTSD and depression comorbidity. *Psychological Trauma: Theory, Research, Practice, and Policy, 8*(1), 9-16. doi:10.1037/tra0000042

Hamberger, L. K., & Larsen, S. E. (2015). Men's and women's experience of intimate partner violence: A review of ten years of comparative studies in clinical samples; part I. *Journal of Family Violence, 30*(6), 699-717. doi:10.1007/s10896-015-9732-8

Hamby, S. (2017). A scientific answer to a scientific question: The gender debate on intimate partner violence. *Trauma, Violence, & Abuse, 18*(2), 145-154. doi:10.1177/1524838015596963

Heavey, S. C., Homish, D. L., Goodell, E. A., & Homish, G. G. (2017). U.S. reserve soldiers' combat exposure and intimate partner violence: Not more common but it is more violent. *Stress and Health*, 2017. doi:10.1002/smi.2748

Hecker, T., Fetz, S., Ainamani, H., & Elbert, T. (2015). The cycle of violence: Associations between exposure to violence, trauma-related symptoms and aggression—findings from Congolese refugees in Uganda. *Journal of Traumatic Stress, 28*(5), 448-455. doi:10.1002/jts.22046

Heinz, A. J., Makin-Byrd, K., Blonigen, D. M., Reilly, P., & Timko, C. (2015). Aggressive behavior among military veterans in substance use disorder treatment: The roles of posttraumatic stress and impulsivity. *Journal of Substance Abuse Treatment, 50*, 59–66. doi:10.1016/j.jsat.2014.10.014

Hipes, C., Lucas, J. W., & Kleykamp, M. (2015). Status- and stigma-related consequences of military service and PTSD: Evidence from a laboratory experiment. *Armed Forces & Society, 41*(3), 477-495. doi:10.1177/0095327X14536710

Hoge, C. W., Ivany, C. G., Brusher, E. A., Brown III, M. D., Shero, J. C., Adler, A. B., ... Orman, D. T. (2015). Transformation of mental health care for US soldiers and families during the Iraq and Afghanistan wars: where science and politics intersect. *American Journal of Psychiatry, 173*(4), 334-343. doi:10.1176/appi.ajp.2015.15040553

Holmes, J. (2014). The psychological immune system: An extended analogy. In *The search for the secure base: Attachment theory and psychotherapy* (pp. 1-5). New York, NY: Routledge.

Holt, S., & DeVaney, J. (2016). Understanding domestic abuse and sexual violence: Prevalence, policy, and practice. In D. Healy, C. Hamilton, Y. Daly, & M. Butler

(Eds.), *The Routledge handbook of Irish criminology* (pp. 70- 88). London, England: Routledge.

Hooker, J. S., & Moore, D. P. (2015). Traumatic brain injury among North Carolina's veterans. *North Carolina Medical Journal, 76*(2), 101-104. doi:10.18043/ncm.76.2.101

Horesh, D., Cohen-Zrihen, A., Ein Dor, T., & Solomon, Z. (2014). Stressful life events across the life span and insecure attachment following combat trauma. *Clinical Social Work Journal, 42*(4), 375-384. doi:10.1007/s10615-014-0477-2

Hundt, N. E., & Holohan, D. R. (2012). The role of shame in distinguishing perpetrators of intimate partner violence in U.S. veterans. *Journal of Traumatic Stress, 25*(2), 191-197. doi:10.1002/jts.21688

Interian, A., Kline, A., Janal, M., Glynn, S., & Losonczy, M. (2014). Multiple deployments and combat trauma: Do homefront stressors increase the risk for posttraumatic stress symptoms? *Journal of Traumatic Stress, 27*(1), 90-97. doi:10.1002/jts.21885

James, L. M., Strom, T. Q., & Leskela, J. (2014). Risk-taking behaviors and impulsivity among veterans with and without PTSD and mild TBI. *Military Medicine, 179*(4), 357-363. doi:10.7205/MILMED-D-13-00241

Johnson, V., & Brown, C. (2014). Applying the Korem profiling system to domestic violence. *U.S. Army Medical Department Journal*, 96-100. Retrieved from http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=100060487&scope=site

Jory, B. (2004). The intimate justice scale: An instrument to screen for psychological abuse and physical violence in clinical practice. *Journal of Marital and Family Therapy, 30*(1), 29-44. doi:10.1111/j.1752-0606.2004.tb01220.x

Kachadourian, L. K., Taft, C. T., Holowka, D. W., Woodward, H., Marx, B. P., & Burns, A. (2013). Maladaptive dependency schemas, posttraumatic stress hyperarousal symptoms, and intimate partner aggression perpetration. *Journal of Traumatic Stress, 26*(5), 580-587. doi:10.1002/jts.21850

Kar, H. L., & O'Leary, K. D. (2013). Emotional intimacy mediates the relationship between posttraumatic stress disorder and intimate partner violence perpetration in OEF/OIF/OND veterans. *Violence and Victims, 28*(5), 790-803. doi:10.1891/0886-6708.VV-D-12-00080

Karakoç, B., Gülseren, L., Çam, B., Gülseren, Ş., Tenekeci, N., & Mete, L. (2015). Prevalence of intimate partner violence and associated factors. *Archives of Neuropsychiatry / Noropsikiatri Arsivi, 52*(4), 324-330. doi:10.5152/npa.2015.7535

Karakurt, G., Silver, K. E., & Keiley, M. K. (2016). Secure base narrative representations and intimate partner violence: A dyadic perspective. *Journal of Family Violence, 31*(4), 467-477. doi:10.1007/s10896-015-9778-7

Katon, J. G., Lehavot, K., Simpson, T. L., Williams, E. C., Barnett, S. B., Grossbard, J. R., ... Reiber, G. E. (2015). Adverse childhood experiences, military service, and adult health. *American Journal of Preventive Medicine, 49*(4), 573-582. doi:10.1016/j.amepre.2015.03.020

Kelley, M. L., Montano, H. G., Lam, N., Hernandez, M., Miller, M. M., & Workgroup, V. M. A. M. (2017). Modeling risk for intimate partner violence among recent-era veteran-partner Dyads. *Journal of Family Violence,* 1-8. doi:10.1007/s10896-016-9903-2

Kelley, M. L., Runnals, J., Pearson, M. R., Miller, M., Fairbank, J. A., Veterans, V. M. A. M. W., ... Brancu, M. (2013). Alcohol use and trauma exposure among male and female veterans before, during, and after military service. *Drug and Alcohol Dependence, 133*(2), 615-624. doi:10.1016/j.drugalcdep.2013.08.002

Kelley, M. L., Stambaugh, L., Milletich, R. J., Veprinsky, A., & Snell, A. K. (2015). Number of deployments, relationship satisfaction and perpetration of partner violence among U.S. Navy members. *Journal of Family Psychology, 29*(4), 635-641. doi:10.1037/fam0000101

Khaw, L. (2016). Stress and coping with intimate partner violence. In C. A. Price, K. R. Bush, & S. J. Price (Eds.), *Families & change: Coping with stressful events and transitions* (pp. 249-269). Thousand Oaks, CA: Sage.

Klaw, E. L., Demers, A. L., & Da Silva, N. (2016). Predicting risk factors for intimate partner violence among post-9/11 college student veterans. *Journal of Interpersonal Violence, 31*(4), 572-597. doi:10.1177/0886260514556102

Knobloch-Fedders, L. M., Caska-Wallace, C., Smith, T. W., & Renshaw, K. (2017). Battling on the home front: Posttraumatic stress disorder and conflict behavior among military couples. *Behavior Therapy, 48*(2), 247-261. doi:10.1016/j.beth.2016.08.014

Koshy, S., & Kaushik, P. (2017). Psycho-social correlates and predictors of quality of life among victims of domestic violence. *International Journal of Social Sciences, 6*(1), 41-52. doi:10.20472/SS2017.6.1.004

Kottenstette, J. B., & Stulberg, D. (2013). Time to routinely screen for intimate partner violence? *The Journal of Family Practice, 62*(2), 90-92. Retrieved from https://mospace.umsystem.edu/xmlui/bitstream/handle/10355/16315/TimeRoutinelyScreenIntimate.pdf?sequence=1

LaMotte, A. D., Taft, C. T., Reardon, A. F., & Miller, M. W. (2014). Agreement between veteran and partner reports of intimate partner aggression. *Psychological Assessment, 26*(4), 1369-1374. doi:10.1037/pas0000018

LaMotte, A. D., Taft, C. T., Weatherill, R. P., Casement, M. D., Creech, S. K., Milberg, W. P., ... McGlinchey, R. E. (2017). Sleep problems and physical pain as moderators of the relationship between PTSD symptoms and aggression in returning veterans. *Psychological trauma: Theory, research, practice, and policy, 9*(1), 113. doi:10.1037/tra0000178

LaMotte, A. D., Taft, C. T., Weatherill, R. P., Scott, J. P., & Eckhardt, C. I. (2014). Examining intimate partner aggression assessment among returning veterans and their partners. *Psychological Assessment, 26*(1), 8. doi:10.1037/a0034579

LaMotte, A., Taft, C., Weatherill, R., Scott, J., & Eckhardt, C. (2016). Posttraumatic stress disorder symptoms, traumatic reminders, and partner aggressive tendencies among veterans. *Journal of Family Violence, 31*(4), 461-466. doi:10.1007/s10896-015-9776-9

Langan, J. M. (2017). PTSD in military service members: To care for him who shall have borne the battle. *DePaul Journal of Health Care Law.* Advance online publication. Retrieved from https://www.researchgate.net/publication/313426206_PTSD_in_Military_Service_Members_To_Care_for_Him_Who_Shall_Have_Borne_the_Battle_19_DePaul_J_Health_Care_L_forthcoming_Mar_2017

Lehrer, E. L., & Son, Y. (2017). *Marital instability in the United States: Trends, driving forces, and implications for children.* Retrieved from ftp://repec.iza.org/RePEc/Discussionpaper/dp10503.pdf

Leone, R. M., Crane, C. A., Parrott, D. J., & Eckhardt, C. I. (2016). Problematic drinking, impulsivity, and physical IPV perpetration: A dyadic analysis. *Psychology of Addictive Behaviors, 30*(3), 1-10. doi:10.1037/adb0000159

Lewis, M., Lamson, A., & White, M. (2016). The state of dyadic methodology: An analysis of the literature on interventions for military couples. *Journal of Couple & Relationship Therapy, 15*(2), 135-157. doi:10.1080/15332691.2015.1106998

Liew, H. (2016). Is there something unique about marriage? The relative impact of marital status on alcohol consumption among military personnel. *Journal of Divorce & Remarriage, 57*(1), 76-85. doi:10.1080/10502556.2015.1088126

Link, P. E., & Palinkas, L. A. (2013). Long-term trajectories and service needs for military families. *Clinical Child and Family Psychology Review, 16*(4), 376-393. doi:10.1007/s10567-013-0145-z

MacManus, D., Rona, R., Dickson, H., Somaini, G., Fear, N., & Wessely, S. (2015). Aggressive and violent behavior among military personnel deployed to Iraq and Afghanistan: Prevalence and link with deployment and combat exposure. *Epidemiologic reviews, 37*(1), 196-212. doi: 10.1093/epirev/mxu006

Mansfield, A. J., Schaper, K. M., Yanagida, A. M., & Rosen, C. S. (2014). One day at a time: The experiences of partners of veterans with posttraumatic stress disorder. *Professional Psychology: Research & Practice, 45*(6), 488-495. doi:10.1037/a0038422

Marshall, E. M., & Kuijer, R. G. (2017). Weathering the storm? The impact of trauma on romantic relationships. *Current Opinion in Psychology, 13*, 54-59. doi:10.1016/j.copsyc.2016.04.013

Marvin, R. S. (2014). Implications of attachment research for the field of family therapy. In P. Erdman & T. Caffery (Eds.), *Attachment and family systems: Conceptual, empirical and therapeutic relatedness* (pp. 3-30). New York, NY: Routledge.

McDermott, R. C., & Lopez, F. G. (2013). College men's intimate partner violence attitudes: Contributions of adult attachment and gender role stress. *Journal of Counseling Psychology, 60*(1), 127-136. doi:10.1037/a0030353

McFarlane, A., & Harvey, S. (2017). Trauma and its effects. In S. Bloch, S. A. Green, A. Janca, P. B. Mitchell, & M. Robertson, *Foundations of clinical psychiatry* (4th ed., pp. 149-161) Melbourne, Australia: Melbourne University Press

McNeil, M. (2014). Women veterans and intimate partner violence: A labyrinth of cause and effect. *Journal of Women's Health, 23*(4), 286-287. doi:10.1089/jwh.2014.4763

Mertens, D. M. (2014). An introduction to research. In *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods* (4th ed., pp. 1-46). Thousand Oaks, CA: Sage Publications.

Messing, J. T., Mendoza, N. S., & Campbell, J. C. (2016). Alcohol use and latent profiles of intimate partner violence. *Journal of Social Work Practice in the Addictions, 16*(1-2), 160-175. doi:10.1080/1533256X.2016.1164058

Mikulincer, M., & Shaver, P. R. (2012). An attachment perspective on psychopathology. *World Psychiatry, 11*(1), 11-15. doi:10.1016/j.wpsyc.2012.01.003

Mikulincer, M., & Shaver, P. R. (2013). An attachment perspective on resilience to stress and trauma. In M. Kent, M. C. Davis, & J. W. Reich, *The resilience handbook: Approaches to stress and trauma*, (pp. 156- 168). New York, NY: Routledge.

Mikulincer, M., & Shaver, P. R. (2015). The psychological effects of the contextual activation of security-enhancing mental representations in adulthood. *Current Opinion in Psychology, 1*, 18-21. doi:10.1016/j.copsyc.2015.01.008

Miles, S. R., Graham, D. P., & Teng, E. J. (2015). Examining the influence of mild traumatic brain injury and posttraumatic stress disorder on alcohol use disorder in OEF/OIF veterans. *Military Medicine, 180*(1), 45-52. doi:10.7205/MILMED-D-14-00187

Miller, L. (2012). Posttraumatic stress disorder and criminal violence: Basic concepts and clinical-forensic applications. *Aggression and Violent Behavior, 17*(4), 354-364. doi:10.1016/j.avb.2012.03.007

Miller, M. W., Wolf, E. J., Reardon, A. F., Harrington, K. M., Ryabchenko, K., Castillo, D., … Heyman, R. (2013). PTSD and conflict behavior between veterans and their intimate partners. *Journal of Anxiety Disorders, 27*(2), 240–251. doi:10.1016/j.janxdis.2013.02.005

Mota, N. P., Medved, M., Wang, J., Asmundson, G. J., Whitney, D., & Sareen, J. (2012). Stress and mental disorders in female military personnel: Comparisons between the sexes in a male dominated profession. *Journal of Psychiatric Research, 46*(2), 159-167. doi:10.1016/j.jpsychires.2011.09.014

Motz, A. (2014). Introduction: Kiss with a fist. In *Toxic couples: The psychology of domestic violence* (pp. 1-23). New York, NY: Routledge.

Murphy, C. M., Norwood, A. E., & Poole, G. M. (2014). Intimate Partner Violence.: A biopsychosocial, social information processing perspective. In *Interpersonal relationships and health: Social and clinical psychological mechanisms* (pp. 156-174). New York, NY: Oxford University Press.

Murray, C. E., Lundgren, K., Olson, L. N., & Hunnicutt, G. (2016). What professionals who are not brain injury specialists need to know about intimate partner violence–related traumatic brain injury. *Trauma, Violence & Abuse, 17*(3), 298-305. doi:10.1177/1524838015584364

National Institute of Mental Health. (2016). *Post-traumatic stress disorder*. Retrieved

from https://www.nimh.nih.gov/health/topics/post-traumatic-stress-disorder-ptsd/index.shtml

Newman, C., & Iwi, K. (2015). Theoretical influences. In *Engaging with perpetrators of domestic violence: Practical techniques for early intervention* (pp. 18-22). London, England: Jessica Kingsley.

Norris, P. (2015). Intimate partner violence. In D. C. Cone, J. H. Brice, T. R. Delbridge, & J. B. Myers (Eds.), *Emergency medical services: Clinical practice and systems oversight* (2nd ed.; pp. 145- 154). Chichester, England: John Wiley & Sons. doi: 10.1002/9781118990810.ch60

Ogle, C. M., Rubin, D. C., & Siegler, I. C. (2015). The relation between insecure attachment and posttraumatic stress: Early life versus adulthood traumas. *Psychological Trauma: Theory, Research, Practice and Policy, 7*(4), 324–332. doi:10.1037/tra0000015

Ogle, C. M., Rubin, D. C., & Siegler, I. C. (2016). Maladaptive trauma appraisals mediate the relation between attachment anxiety and PTSD symptom severity. *Psychological Trauma: Theory, Research, Practice, and Policy, 8*(3), 301. doi:10.1037/tra0000112

Oka, M., Sandberg, J. G., Bradford, A. B., & Brown, A. (2014). Insecure attachment behavior and partner violence: Incorporating couple perceptions of insecure attachment and relational aggression. *Journal of Marital & Family Therapy, 40*(4), 412-429. doi:10.1111/jmft.12079

Okuda, M., Olfson, M., Wang, S., Rubio, J. M., Xu, Y., & Blanco, C. (2015). Correlates of intimate partner violence perpetration: Results from a national epidemiologic survey. *Journal of Traumatic Stress, 28*(1), 49-56. doi:10.1002/jts.21986

Ortigo, K. M., Westen, D., DeFife, J. A., & Bradley, B. (2013). Attachment, social cognition, and posttraumatic stress symptoms in a traumatized, urban population: Evidence for the mediating role of object relations. *Journal of Traumatic Stress, 26(*3), 361-368. doi:10.1002/jts.21815

Owens, G. P., Held, P., Blackburn, L., Auerbach, J. S., Clark, A. A., Herrera, C. J., ... Stuart, G. L. (2013). Differences in relationship conflict, attachment, and depression in treatment-seeking veterans with hazardous substance use, PTSD, or PTSD and hazardous substance use. *Journal of Interpersonal Violence, 29*(7) 1318–1337. doi:10.1177/0886260513506274

Palitsky, D., Mota, N., Afifi, T. O., Downs, A. C., & Sareen, J. (2013). The association between adult attachment style, mental disorders, and suicidality: Findings from a population-based study. *Journal of Nervous and Mental Disease, 201*(7), 579-586. doi:10.1097/NMD.0b013e31829829ab

Park, C. J. (2016). Intimate partner violence: An application of attachment theory. *Journal of Human Behavior in the Social Environment, 26*(5), 488-497. doi:10.1080/10911359.2015.1087924

Pascuzzo, K., Moss, E., & Cyr, C. (2015). Attachment and emotion regulation strategies in predicting adult psychopathology. *SAGE Open, 5*(3), 1-15. doi:10.1177/2158244015604695

Pietrzak, R. H., Johnson, D. C., Goldstein, M. B., Malley, J. C., & Southwick, S. M. (2015). Perceived stigma and barriers to mental health care utilization among OEF-OIF veterans. *Psychiatric services, 60*(8), 1118-1122. doi:10.1176/ps.2009.60.8.1118

Powell, R. M., Marquez, M. R., & Perkins, G. E. (2014). The military and intimate partner violence- a call for open discussion. *Journal of Social Welfare and Human Rights, 2*(1), 177-184. doi:10.15640/jswhr

Raji, C. A., Willeumier, K., Taylor, D., Tarzwell, R., Newberg, A., Henderson, T. A., & Amen, D. G. (2015). Functional neuroimaging with default mode network regions distinguishes PTSD from TBI in a military veteran population. *Brain imaging and behavior*, *9*(3), 527-534. doi:10.1007/s11682-015-9385-5

Ravitz, P., Maunder, R., Hunter, J., Sthankiya, B., & Lancee, W. (2010). Adult attachment measures: A 25-year review. *Journal of Psychosomatic Research, 69*(4), 419-432. doi:10.1016/j.jpsychores.2009.08.006

Reidy, D. E., Berke, D. S., Gentile, B., & Zeichner, A. (2014). Man enough? Masculine discrepancy stress and intimate partner violence. *Personality and Individual Differences, 68*, 160-164. doi:10.1016/j.paid.2014.04.021

Roberts, M., & Russo, R. (2014). An introduction to factorial design and interactions. In, *A student's guide to analysis of variance* (pp.134-152). New York, NY: Routledge.

Rodrigues, A. E., Funderburk, J. S., Keating, N. L., & Maisto, S. A. (2015). A

methodological review of intimate partner violence in the military: Where do we go from here? *Trauma, Violence, & Abuse, 16*(3), 231-240. doi:10.1177/1524838014526066

Rudenstine, S., Cohen, G., Prescott, M., Sampson, L., Liberzon, I., Tamburrino, M., ... Galea, S. (2015). Adverse childhood events and the risk for new-onset depression and post-traumatic stress disorder among U.S. National Guard soldiers. *Military Medicine, 180*(9), 972-978. doi:10.7205/MILMED-D-14-00626

Ruddle, A., Pina, A., & Vasquez, E. (2017). Domestic violence offending behaviors: A review of the literature examining childhood exposure, implicit theories, trait aggression and anger rumination as predictive factors. *Aggression and Violent Behavior, 34*, 154-165. doi:10.1016/j.avb.2017.01.016

Sandoz, E. K., Moyer, D. N., & Armelie, A. P. (2014). Psychological flexibility as a framework for understanding and improving family reintegration following military deployment. *Journal of Marital and Family Therapy, 41*(4), 495-507. doi:10.1111/jmft.12086

Sawh, L., Pinals, D. A., Smelson, D., Fulwiler, C., Singer, S., O'Connor, K., ... Gonzalez, G. (2015). Pre-military victimization and trauma among a sample of justice-involved veterans. *Drug & Alcohol Dependence, 146*, 89. doi: 10.1016/j.drugalcdep.2014.09.611

Saxe, J. L., & Perdue, C. L. (2015). Associations between operationally estimated blast exposures and postdeployment diagnoses of postconcussion syndrome and posttraumatic stress disorder. *U.S. Army Medical Department Journal*, 73-78.

Retrieved from http://web.b.ebscohost.com.ezp.waldenulibrary.org/ehost/pdfviewer/pdfviewer?sid=a6b2554c-3d4d-419c-b00b-616cc14caa6c%40sessionmgr105&vid=1&hid=102

Schimmenti, A., & Bifulco, A. (2015). Linking lack of care in childhood to anxiety disorders in emerging adulthood: the role of attachment styles. *Child and Adolescent Mental Health, 20*(1), 41-48. doi:10.1111/camh.12051

Seedall, R. B., & Wampler, K. S. (2013). An attachment primer for couple therapists: Research and clinical implications. *Journal of Marital and Family Therapy, 39*(4), 427-440. doi:10.1111/jmft.12024

Semiatin, J. N., Torres, S., LaMotte, A. D., Portnoy, G. A., & Murphy, C. M. (2017). Trauma exposure, PTSD symptoms, and presenting clinical problems among male perpetrators of intimate partner violence. *Psychology of Violence*, 7(1), 91-100. doi:10.1037/vio0000041

Sherman, S., Fostick, L., & Zohar, J. (2014). Comparison of criminal activity between Israeli veterans with and without PTSD. *Depression & Anxiety, 31*(2), 143-149. doi:10.1002/da.22161

Shewmaker, P., & Shewmaker, S. (2014). Military nuances in domestic violence cases. *American Journal of Family Law, 28*(1), 25-30. Retrieved from http://ezp.waldenulibrary.org/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=94589597&scope=site

Simpson, J. A., & Tran, S. (2013). The needs, benefits, and perils of close relationships.

In P. Noller & J. A. Feeney (Eds.), *Close relationships: Functions, forms and processes* (pp. 3-24). New York, NY: Psychology Press.

Simpson, T. L., Stappenbeck, C. A., Luterek, J. A., Lehavot, K., & Kaysen, D. L. (2014). Drinking motives moderate daily relationships between PTSD symptoms and alcohol use. *Journal of Abnormal Psychology, 123*(1), 237-247. doi:10.1037/a0035193

Simundic, A. M. (2013). Bias in research. *Biochemia medica, 23*(1), 12-15. doi:10.11613/BM. 2013.003

Slep, A. M., Foran, H. M., Heyman, R. E., Snarr, J. D., & Progr, U. F. (2014). Identifying unique and shared risk factors for physical intimate partner violence and clinically-significant physical intimate partner violence. *Aggressive Behavior, 41*(3), 227-241. doi:10.1002/ab.21565

Skomorovsky, A., & LeBlanc, M. M. (2017). Intimate partner violence in the Canadian Armed Forces: Psychological distress and the role of individual factors among military spouses. *Military Medicine, 182*(1), e1568-e1575. doi:10.7205/MILMED-D-15-00566

Smith, J., & Noble, H. (2014). Bias in research. *Evidence Based Nursing, 17*(4), 100-101. doi:10.1136/eb-2014-101946

Smith, L. S., & Stover, C. S. (2016). The moderating role of attachment on the relationship between history of trauma and intimate partner violence victimization. *Violence Against Women, 22*(6), 745-764. doi:10.1177/1077801215610863

Smith, R. T., & Whooley, O. (2015). Dropping the disorder in PTSD. *Contexts, 14*(4), 38-43. doi:10.1177/1536504215609300

Sotiropoulos, A. M. (2017). Words can cut the deepest wounds: Why the Family Medical Leave Act should be amended to expand protection for victims of domestic violence. *DePaul Law Review, 65*(4), 1361-1401. Retrieved from http://via.library.depaul.edu/cgi/viewcontent.cgi?article=4000&context=law-review&sei-redir=1&referer=https%3A%2F%2Fscholar.google.com%2Fscholar%3Fstart%3D10%26q%3Ddomestic%2Bviolence%2Bvictims%2Bmilitary%26hl%3Den%26as_sdt%3D0%2C34%26as_ylo%3D2017#search=%22domestic%20violence%20victims%20military%22

Spivak, H., Jenkins, E., VanAudenhove, K., Lee, D., Kelly, M., & Iskander, J. (2014). CDC grand rounds: A public health approach to prevention of intimate partner violence. *Morbidity and Mortality Weekly Report, 63*(2), 38-41. Retrieved from http://www.cdc.gov/Mmwr/preview/mmwrhtml/mm6302a4.htm

Stangor, C. (2014). Correlational research designs. In *Research methods for the behavioral sciences* (5th ed.; pp. 161-186). Belmont, CA: Wadsworth.

Stappenbeck, C. A., Hellmuth, J. C., Simpson, T., & Jakupcak, M. (2014). The effects of alcohol problems, PTSD, and combat exposure on nonphysical and physical aggression among Iraq and Afghanistan war veterans. *Psychological Trauma : Theory, Research, Practice and Policy*, *6*(1), 65-72. doi:10.1037/a0031468

Stein, M. B., Kessler, R. C., Heeringa, S. G., Jain, S., Campbell-Sills, L., Colpe, L. J., ...

Sun, X. (2015). Prospective longitudinal evaluation of the effect of deployment-acquired traumatic brain injury on posttraumatic stress and related disorders: Results from the Army study to assess risk and resilience in servicemembers (Army STARRS). *American Journal of Psychiatry*, *172*(11), 1101-1111. doi:10.1176/appi.ajp.2015.14121572

Steven Rholes, W., Paetzold, R. L., & Kohn, J. L. (2016). Disorganized attachment mediates the link from early trauma to externalizing behavior in adult relationships. *Personality & Individual Differences, 90*, 61-65. doi:10.1016/j.paid.2015.10.043

Sullivan, C. P., & Elbogen, E. B. (2014). PTSD symptoms and family versus stranger violence in Iraq and Afghanistan veterans. *Law & Human Behavior (American Psychological Association), 38*(1), 1-9. doi:10.1037/1hb0000035

Sween, M., & Reyns, B. W. (2017). An empirical test of target congruence theory on intimate partner violence. *Deviant Behavior, 38*(1), 61-73. doi:10.1080/01639625.2016.1191914

Taft, C. T. (2013). Working together to address domestic violence among veterans. *Journal of Clinical Psychiatry, 74*(12), e25. doi:10.4088/JCP.12124tx2c

Taft, C. T., Howard, J., Monson, C. M., Walling, S. M., Resick, P. A., & Murphy, C. M. (2014). "Strength at Home" intervention to prevent conflict and violence in military couples: Pilot findings. *Partner Abuse, 5*(1), 41-57. doi:10.1891/1946-6560.5.1.41

Taft, C. T., Kachadourian, L. K., Suvak, M. K., Pinto, L. A., Miller, M. M., Knight, J. A., & Marx, B. P. (2012). Examining impelling and disinhibiting factors for intimate partner violence in veterans. *Journal of Family Psychology, 26*(2), 285-289. doi:10.1037/a0027424

Tasso, A., Whitmarsh, L., & Ordway, A. (2016). Intimate partner violence within military families intervention guidelines for relational aggressors. *Family Journal: Counseling and Therapy for Couples and Families, 24*(2) 114-121. doi:10.1177/1066480716628622

Testa, M., & Derrick, J. L. (2014). A daily process examination of the temporal association between alcohol use and verbal and physical aggression in community couples. *Psychology of Addictive Behaviors: Journal of the Society of Psychologists in Addictive Behaviors, 28*(1), 127–138. doi:10.1037/a0032988

Tharp, A. T., Sherman, M. D., Bowling, U., & Townsend, B. J. (2016). Intimate partner violence between male Iraq and Afghanistan veterans and their female partners who seek couples therapy. *Journal of Interpersonal Violence, 31*(6) 1095–1115. doi:10.1177/0886260514564067

Trevillion, K., Williamson, E., Thandi, G., Borschmann, R., Oram, S., & Howard, L. M. (2015). A systematic review of mental disorders and perpetration of domestic violence among military populations. *Social Psychiatry and Psychiatric Epidemiology, 50*(9), 1329-1346. doi:10.1007/s00127-015-1084-4

Troyanskaya, M., Pastorek, N. J., Scheibel, R. S., Petersen, N. J., McCulloch, K., Wilde,

E. A., ... Levin, H. S. (2015). Combat exposure, PTSD symptoms, and cognition following blast-related traumatic brain injury in OEF/OIF/OND service members and veterans. *Military medicine, 180*(3), 285-289. doi:10.7205/MILMED-D-14-00256

Tsai, A. C. (2013). Intimate partner violence and population mental health: Why poverty and gender inequities matter. *PLOS Med, 10*(5): e1001440, doi:10.1371/journal.pmed.1001440

Tschiffely, A. E., Ahlers, S. T., & Norris, J. N. (2015). Examining the relationship between blast-induced mild traumatic brain injury and posttraumatic stress-related traits. *Journal of Neuroscience Research, 93*(12), 1769-1777. doi:10.1002/jnr.23641

U.S. Department of Veterans Affairs (2015). *Intimate partner violence*. Retrieved from http://www.ptsd.va.gov/public/types/violence/domestic-violence.asp

van Rosmalen, L., van der Horst, F. P., & van der Veer, R. (2016). From secure dependency to attachment: Mary Ainsworth's integration of Blatz's security theory into Bowlby's attachment theory. *History of Psychology, 19*(1), 22-39. doi:10.1037/hop0000015

Van Voorhees, E. E., & Beckham, J. C. (2015). Advancements in treating intimate partner violence in veterans. *The Journal of Clinical Psychiatry*, *76*(6), 826. doi:10.4088/JCP.14com09556

Van Voorhees, E. E., Dennis, P. A., Elbogen, E. B., Clancy, C. P., Hertzberg, M. A., Beckham, J. C., & Calhoun, P. S. (2014). Personality Assessment Inventory

internalizing and externalizing structure in veterans with posttraumatic stress disorder: Associations with aggression. *Aggressive Behavior, 40*(6), 582-592. doi:10.1002/ab.21554

Vasterling, J. J., Taft, C. T., Proctor, S. P., MacDonald, H. Z., Lawrence, A., Kalill, K., … Fairbank, J. A. (2015). Establishing a methodology to examine the effects of war-zone PTSD on the family: The family foundations study. *International Journal of Methods in Psychiatric Research, 24*(2), 143–155. doi:10.1002/mpr.1464

Vinck, P., & Pham, P. N. (2013). Association of exposure to intimate-partner physical violence and potentially traumatic war-related events with mental health in Liberia. *Social Science & Medicine, 77*, 41-49. doi:10.1016/j.socscimed.2012.10.026

Walker, W. C., McDonald, S. D., & Franke, L. M. (2014). Diagnostic accuracy of posttraumatic stress disorder checklist in blast-exposed military personnel. *Journal of Rehabilitation Research & Development, 51*(8), 1203-1216. doi:10.1682/JRRD.2013.12.0271

Wallace, P. H., & Roberson, C. (2015). Characteristics and consequences of family violence. In *Family violence: Legal, medical, and social perspectives* (7th ed., pp. 1-40). New York, NY: Routledge.

Walsh, J., Spangaro, J., & Soldatic, K. (2015). Global understandings of domestic violence. *Nursing & Health Sciences, 17*(1), 1-4.doi: 10.1111/nhs.12197

Watkins, K., Sudom, K., & Zamorski, M. (2016). Association of combat experiences

with post-traumatic stress disorder among Canadian military personnel deployed in support of the mission in Afghanistan. *Military Behavioral Health*, 1-8. doi:10.1080/21635781.2016.1153538

Weathers, F. W., Litz, B., Herman, D. S., Huska, J. A., & Keane, T. M. (1993). *The PTSD Checklist: Reliability, validity, and diagnostic utility.* Annual Meeting of the International Society of Traumatic Stress Studies: San Antonio, TX

Wei, M. (2015). The implications of attachment theory in counseling and psychotherapy. *The Society for the Advancement of Psychotherapy*. Retrieved from http://societyforpsychotherapy.org/the-implications-of-attachment-theory-in-counseling-and-psychotherapy/

Whelan, J. J. (2015). Effects of developmental abuse and symptom suppression among traumatized veterans. *Psychology, 6*(5), 540. doi:10.4236/psych.2015.65052

Wiebe, S. A., & Johnson, S. M. (2017). Creating relationships that foster resilience in Emotionally Focused Therapy. *Current Opinion in Psychology*, *13*, 65-69. doi:10.1016/j.copsyc.2016.05.001

Wilhelm, K., Gillis, I., & Parker, G. (2016). Parental bonding and adult attachment style: The relationship between four category models. *International Journal of Women's Health and Wellness, 2*(1), 1-7. doi:10.23937/2474-1353/1510016

Wilhelmsson Göstas, M., Wiberg, B., Engström, I., & Kjellin, L. (2012). Self- reported anxious- and avoidant-related attachment correlated to interpersonal problems patients starting psychotherapy. *E-Journal of Applied Psychology, 8*(1), 9-17. doi:10.7790/ejap.v8i1.261

Wilk, J. E., Quartana, P. J., Clarke-Walper, K., Kok, B. C., & Riviere, L. A. (2015). Aggression in US soldiers post-deployment: Associations with combat exposure and PTSD and the moderating role of trait anger. *Aggressive behavior, 41*(6), 556-565. doi:10.1002/ab.21595

Wilkins, K. C., Lang, A. J., & Norman, S. B. (2011). Synthesis of the psychometric properties of the PTSD Checklist (PCL) military, civilian, and specific versions. *Depression and Anxiety, 28*(7), 596–606. doi:10.1002/da.20837

Williston, S. K., Taft, C. T., & VanHaasteren, K. O. (2015). Military veteran perpetrators of intimate partner violence: Challenges and barriers to coordinated intervention. *Aggression and violent behavior, 21*, 55-60. doi:10.1016/j.avb.2015.01.008

Wilson, I. M., Graham, K., & Taft, A. (2016). Living the cycle of drinking and violence: A qualitative study of women's experience of alcohol-related intimate partner violence. *Drug and alcohol review*. doi:10.1111/dar.12405

Wilson, J. B., Gardner, B. C., Brosi, M. W., Topham, G. L., & Busby, D. M. (2013). Dyadic adult attachment style and aggression within romantic relationships. *Journal of Couple & Relationship Therapy, 12*(2), 186-205. doi:10.1080/15332691.2013.779185

Wolf, E. J., Harrington, K. M., Reardon, A. F., Castillo, D., Taft, C. T., & Miller, M. W. (2013). A dyadic analysis of the influence of trauma exposure and posttraumatic stress disorder severity on intimate partner aggression. *Journal of Traumatic Stress, 26*(3), 329-337. doi:10.1002/jts.21805

Wolford-Clevenger, C., & Smith, P. N. (2017). The conditional indirect effects of suicide attempt history and psychiatric symptoms on the association between intimate partner violence and suicide ideation. *Personality and Individual Differences, 106*, 46-51. doi:10.1016/j.paid.2016.10.042

Woodhouse, S., Ayers, S., & Field, A. P. (2015). The relationship between adult attachment style and post-traumatic stress symptoms: A meta-analysis. *Journal of Anxiety Disorders, 35,* 103-117. doi:10.1016/j.janxdis.2015.07.002

World Health Organization. (2016). *Intimate partner violence*. Retrieved from http://iris.wpro.who.int/bitstream/handle/10665.1/13134/WPR_2016_DNH_012_eng.pdf

World Health Organization. (2016). *Violence against women*. Retrieved from http://www.who.int/mediacentre/factsheets/fs239/en/

Wright, M. F. (2017). Intimate partner aggression and adult attachment insecurity: The mediation of jealousy and anger. *Evolutionary Behavioral Sciences, 11*(2), 187-198. doi:10.1037/ebs0000097

Wu, W. L., Zhang, W., & Liu, X. H. (2004). The reliability and validity of adult attachment scale (AAS-1996 revised edition): A report on its application in China. *Sichuan da xue xue bao. Yi xue ban= Journal of Sichuan University. Medical science edition, 35*(4), 536-538. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/15291121

Xue, C., Ge, Y., Tang, B., Liu, Y., Kang, P., Wang, M., & Zhang, L. (2015). A metaanalysis of risk factors for combat-related PTSD among military personnel

and veterans. *Plos ONE, 10*(3), 1-20. doi:10.1371/journal.pone.0120270

Yambo, T. W., Johnson, M. E., Delaney, K. R., Hamilton, R., Miller, A. M., & York, J. A. (2016). Experiences of military spouses of veterans with combat-related posttraumatic stress disorder. *Journal of Nursing Scholarship, 48*(6), 543-551. doi:10.1111/jnu.12237

Yehuda, R., Vermetten, E., McFarlane, A. C., & Lehrner, A. (2014). PTSD in the military: Special considerations for understanding prevalence, pathophysiology and treatment following deployment. *European Journal of Psychotraumatology*, *5*. doi:10.3402/ejpt.v5.25322

Yuan, Y., & MacKinnon, D. P. (2014). Robust mediation analysis based on median regression. *Psychological Methods, 19*(1), 1–20. doi:10.1037/a0033820

Zamorski, M. A., & Wiens-Kinkaid, M. E. (2013). Cross-sectional prevalence survey of intimate partner violence perpetration and victimization in Canadian military personnel. *BMC Public Health, 13*(1), 1-31. doi:10.1186/1471-2458-13-1019

Zerach, G., Solomon, Z., Horesh, D., & Ein-Dor, T. (2013). Family cohesion and posttraumatic intrusion and avoidance among war veterans: a 20-year longitudinal study. *Social Psychiatry and Psychiatric Epidemiology, 48*(2), 205-214. doi:10.1007/s00127-012-0541-6

Zieman, G., Bridwell, A., & Cardenas, J. F. (2017). Traumatic brain injury in domestic violence victims: A retrospective study at the Barrow Neurological Institute. *Journal of Neurotrauma*, *34*(4), 876-880. doi:10.1089/neu.2016.4579

Appendix A: Permission to Use Intimate Justice Scale

Intimate Justic Scale

Jory, Brian
Thu 10/6/2016, 12:18 PM
kristy wood

IJS Administration and Scoring Guidelines.doc23 KB	Intimate Justice Scale.pdf18 KB	Spanish IJS.pdf18 KB	THE INTIMATE JUSTICE SCALE.doc190 KB

Show all 4 attachments (249 KB) Download all
Save all to OneDrive - Laureate Education
Kristy,

Thank you for your interest in the Intimate Justice Scale. You have my permission to use the IJS in your dissertation as long as you use it according to the guidelines. I've attached several items which may be useful to you. Best wishes, Dr. Jory

Brian Jory, Ph.D.
Professor and Director of Family Studies
Berry College

Only those who risk going too far ever know how far they can go.

Appendix B: Recruitment Invitations

My name is Kristy Wood and I am a doctoral student working on the data collection stage for my dissertation entitled Intimate Partner Violence in Military Couples.
You are invited to participate in a research study on the relationship between attachment styles, symptoms of posttraumatic stress disorder, and intimate partner violence in military couples. Being a participant is voluntary, and the only criteria for inclusion are being a part a military couple and participation from both members of the couple. By participating in this study, the knowledge on military couples and what factors influence intimate partner violence may be expanded. This new knowledge may be used to improve prevention and intervention programs and help to create healthier military families. To participate in the study, please fill out and return the survey documents to the researcher at your convenience.

My name is Kristy Wood and I am a doctoral student working on the data collection stage for my dissertation entitled Intimate Partner Violence in Military Couples.
You are invited to participate in a research study on the relationship between attachment styles, symptoms of posttraumatic stress disorder, and intimate partner violence in military couples. Being a participant is voluntary, and the only criteria for inclusion are being a part a military couple and participation from both members of the couple. By participating in this study, the knowledge on military couples and what factors influence intimate partner violence may be expanded. This new knowledge may be used to improve prevention and intervention programs and help to create healthier military families. To participate in the study, please click on the link provided to you.

Appendix C: Demographic Form

Age: _____

Gender: Male ____ Female ____

Ethnicity: Black _____ White _____ Asian ____ American Indian ____ Alaskan Native ____

Native Hawaiian ____ Other ____

Education Level: Less than High School ____ High School Graduate ____ Some College ____

College Degree ____

Marital Status: Married ____ Cohabitating ____

Length of Relationship ____

Number of Children ____

Income: Less than $25,000 ____ $25,000- $50,000 ____ $50,001-$75,000 ____

Over $75,001 ____

Military relation: Active Duty ____ Reserve _____ Civilian Partner/Spouse _____

Rank of Soldier _____

Length of Time Soldier has Served ____

Number of Combat Deployments Soldier has been on ____

Diagnosis of Traumatic Brain Injury: Yes ____ No ____

Appendix D: Adult Attachment Scale (Collins & Read, 1990)

Please read each of the following statements and rate the extent to which it describes your feelings about romantic relationships. Please think about all your relationships (past and present) and respond in terms of how you generally feel in these relationships. If you have never been involved in a romantic relationship, answer in terms of how you think you would feel.

Please use the scale below by placing a number between 1 and 5 in the space provided to the right of each statement.

1----------2----------3----------4----------5

Not at all characteristic of me Very characteristic of me

(1) I find it relatively easy to get close to others. _____

(2) I do not worry about being abandoned. _____

(3) I find it difficult to allow myself to depend on others. _____

(4) In relationships, I often worry that my partner does not really love me. _____

(5) I find that others are reluctant to get as close as I would like. _____

(6) I am comfortable depending on others. _____

(7) I do not worry about someone getting too close to me. _____

(8) I find that people are never there when you need them. _____

(9) I am somewhat uncomfortable being close to others. _____

(10) In relationships, I often worry that my partner will not want to _____

stay with me.

(11) I want to merge completely with another person. _____

(12) My desire to merge sometimes scares people away. _____

(13) I am comfortable having others depend on me. _____

(14) I know that people will be there when I need them. _____

(15) I am nervous when anyone gets too close. _____

(16) I find it difficult to trust others completely. _____

(17) Often, partners want me to be closer than I feel comfortable being. _____

(18) I am not sure that I can always depend on others to be there when I need them.

_____

Appendix E: PCL-M

Post-Traumatic Stress Assessment

1 2 3 4 5

Not at all A little bit Moderately Quite a bit Extremely

Instructions: Below is a list of problems and complaints that veterans sometimes have in response to stressful life experiences. Please read each one carefully, mark the answer to indicate how much you have been bothered by that problem in the last month.

Not at all A little bit Moderately Quite a Bit Extremely

Repeated, disturbing memories, thoughts, or images of a stressful military experience from the past? 1 2 3 4 5

Repeated, disturbing dreams of a stressful military experience from the past? 1 2 3 4 5

Suddenly acting or feeling as if a stressful military experience were happening again (as if you were reliving it)? 1 2 3 4 5

Feeling very upset when something reminded you of a stressful military experience from the past? 1 2 3 4 5

Having physical reactions (e.g., heart pounding, trouble breathing, or sweating) when something reminded you of a stressful military experience from the past? 1 2 3 4 5

Avoiding thinking about or talking about a stressful military experience from the past or

avoid having feelings related to it? 1 2 3 4 5

Avoid activities or situations because they remind you of a stressful military experience

from the past? 1 2 3 4 5

Trouble remembering important parts of a stressful military experience from the past? 1 2 3 4 5

Loss of interest in things that you used to enjoy? 1 2 3 4 5

Feeling distant or cut off from other people? 1 2 3 4 5

Feeling emotionally numb or being unable to have loving feelings for those close to you? 1 2 3 4 5

Feeling as if your future will somehow be cut short? 1 2 3 4 5

Trouble falling or staying asleep? 1 2 3 4 5

Feeling irritable or having angry outbursts? 1 2 3 4 5

Having difficulty concentrating? 1 2 3 4 5

Being “super alert” or watchful on guard? 1 2 3 4 5

Feeling jumpy or easily startled? 1 2 3 4 5

Appendix F: The Intimate Justice Scale

Read each item below to see if it describes how your partner usually treats you. Then circle the number that best describes how strongly you agree or disagree with whether it applies to you.

I do not agree at all I strongly agree

My partner never admits when she or he is wrong 1 2 3 4 5

My partner is unwilling to adapt to my needs and expectations 1 2 3 4 5

My partner is more insensitive than caring. 1 2 3 4 5

I am often forced to sacrifice my own needs to meet my partner's needs. 1 2 3 4 5

My partner refuses to talk about problems that make him or her look bad. 1 2 3 4 5

My partner withholds affection unless it would benefit her or him. 1 2 3 4 5

It is hard to disagree with my partner because she or he gets angry. 1 2 3 4 5

My partner resents being questioned about the way he or she treats me 1 2 3 4 5

My partner builds himself or herself up by putting me down. 1 2 3 4 5

My partner retaliates when I disagree with him or her. 1 2 3 4 5

My partner is always trying to change me. 1 2 3 4 5

My partner believes he or she has the right to force me to do things. 1 2 3 4 5

My partner is too possessive or jealous. 1 2 3 4 5

My partner tries to isolate me from family and friends. 1 2 3 4 5

Sometimes my partner physically hurts me. 1 2 3 4 5